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International Earnings for Second Quarter

A. R. Graustein, President of the Company in Submitting the Report, Says That the Low Earnings Reflect a Somewhat Greater Curtailment of Operations Than Was Anticipated—Construction on Gatineau River Approaching Completion, Involving One of the World's Largest Storage Reservoirs and Three Hydro-Electric Stations

A. R. Graustein president, in connection with the report of the International Paper Company for the second quarter ending June 30, 1928 says:

"Submitted herewith is a consolidated profit and loss statement for the second quarter and for the first two quarters of the year 1928, together with comparative figures for the same periods of 1927. The low earnings reflect a somewhat greater curtailment of operations than was anticipated.

"The earnings shown in these statements do not include the undistributed portion of the earnings accruing on the common shares of New England Power Association held by International Paper Company.

"The company's construction program on the Gatineau River is now approaching completion. This program, embarked upon in October, 1925, involves one of the world's largest storage reservoirs, three hydro-electric power stations built for a total installation of 562,000 h.p. of which 436,000 h.p. are now installed or about to be installed, and a considerable mileage of high-tension transmission lines. Variations from cost estimates have approximately offset one another, so that the aggregate cost of the entire system will, apparently, vary from the estimates by less than 1 per cent. Delivery of the first block of power to the Hydro-Electric Power Commission of Ontario will commence October 1 of this year, and with the deliveries of additional blocks in 1929 and 1930 the company's earnings statements should reflect the anticipated return upon this investment.

Acquires Big Lumber Tract in Adirondacks

GLOVERSVILLE, N. Y., August 20, 1928.—The Farrell Lumber Company, of Walton, of which Jerome J. Farrell is president, has purchased the cutting rights on 12,000 acres of timberland owned by the Ballou estate in the Adirondacks. The tract is along West Canada Creek in Herkimer and Hamilton counties and is estimated to cut approximately 50,000,000 feet. The operation will extend over a period of ten years.

INTERNATIONAL PAPER COMPANY AND SUBSIDIARY COMPANIES
CONSOLIDATED EARNINGS STATEMENT FOR SECOND QUARTER ENDING JUNE 30, 1928, AND FOR THE YEAR TO DATE

	Quarter Ending June 30, 1928	Quarter Ending June 30, 1927	Six Months Ending June 30, 1928	Six Months Ending June 30, 1927	Changes Year to Date
Total Revenue	$ 4,385,685.74	$ 3,896,971.45	$ 8,774,813.48	$ 7,071,551.63	$ 1,703,261.85 Inc.
Less					
Depreciation	1,523,817.74	1,142,016.24	2,891,624.79	2,095,480.90	796,143.89 Inc.
Interest on Funded Debt	1,274,102.14	1,137,340.80	2,443,254.38	2,224,720.79	218,533.59 Inc.
Amortization of Discount on Funded Debt	77,194.93	89,584.52	151,924.49	169,096.50	17,172.01 Dec.
Reserve for Income Taxes	95,000.00	115,000.00	215,000.00	175,000.00	40,000.00 Inc.
	$ 2,970,114.81	$ 2,483,941.56	$ 5,701,803.66	$ 4,664,298.19	$ 1,037,505.47 Inc.
Net Revenue Available for Dividends	$ 1,415,570.93	$ 1,413,029.89	$ 3,073,009.82	$ 2,407,253.44	$ 665,756.38 Inc.
Dividends on Canadian Hydro-Electric Corporation, Ltd., First Preferred Stock	187,500.00	.....	375,000.00	.....	375,000.00 Inc.
Net Revenue Available for Dividends on International Paper Company Stocks	$ 1,228,070.93	$ 1,413,029.89	$ 2,698,009.82	$ 2,407,253.44	$ 290,756.38 Inc.
Dividends on International Paper Company Preferred Stock	1,661,300.35	873,986.77	3,239,733.70	1,457,667.21	1,782,066.49 Inc.
Dividends on International Paper Company Common Stock	600,000.00	523,467.00	1,199,993.40	773,467.00	426,526.40 Inc.
Total Dividends	$ 2,261,300.35	$ 1,397,453.77	$ 4,439,727.10	$ 2,231,134.21	$ 2,208,592.89 Inc.
Balance of Net Revenue or Deficit to Surplus	$ 1,033,229.42*	$ 15,576.12	$ 1,741,717.28*	$ 176,119.23	$ 1,917,836.51 Dec.
Paid in Surplus					
Conversion of International Paper Company 6% to to 7% Preferred Stock	25,250.00	18,300.00	27,550.00	29,750.00	2,200.00 Dec.
Premium received on sale of International Paper Company 7% Preferred Stock	.....	.....	218,754.29	.....	218,754.29 Inc.
	$ 25,250.00	$ 18,300.00	$ 246,304.29	$ 29,750.00	$ 216,554.29 Inc.
Surplus Change	$ 1,007,979.42*	$ 33,876.12	$ 1,495,412.99*	$ 205,869.23	$ 1,701,282.22 Dec.
Surplus Beginning	22,161,110.24	22,430,073.46	22,648,543.81	22,258,080.35	390,463.46 Inc.
Surplus End	$21,153,130.82	$22,463,949.58	$21,153,130.82	$22,463,949.58	$ 1,310,818.76 Dec.

* Deficit.

Canada Endeavors to Solve News Print Problem

Provincial Premiers and Mill Executives Scheduled to Meet This Week to Formulate Plans For Controlling Production and Stabilizing Prices—Governing Authorities Anxious to Prevent Financial Loss to Dominion Through Depletion of Natural Resources

[FROM OUR REGULAR CORRESPONDENT]

MONTREAL, Que., August 20, 1928.—An epoch in the pulp and paper industry in Canada was marked when the Hon. Sir Lorner Gouin, as Premier of the Province of Quebec, introduced the policy by which a virtual embargo on the export of pulp wood cut from Crown lands in the Province was established. This was done by inserting in each lease permitting the cutting of pulp wood a clause to the effect that such pulp wood should not be exported in an unmanufactured state. This policy was quickly followed by the other Provinces and as most of the forest lands in Canada are Crown lands—that is to say, the property of the Province, or, as is the case in the Prairie Provinces, the property of the Dominion—a great impetus was given to the manufacture of pulp and paper in Canada. In fact, to the inauguration of this policy may be traced the rise of the news print industry to one of national importance.

The present week is likely to mark another epoch in the industry, for a meeting is scheduled to take place between the Provincial Premiers and the executives of the news print manufacturing companies with the express object of controlling output and stabilizing prices. For a long time past the Provincial governments, particularly those of Quebec and Ontario, have been giving anxious consideration to the problems arising from the over-extension of the news print industry. Some time ago the Quebec Government let it be known that no further permits for the building of mills would be granted to new companies, Premier Taschereau adding that a few strong and prosperous companies were preferable to numerous weak ones struggling on a competitive and non-paying basis. Premier Ferguson, of Ontario, let it be known that he also held like views.

But events have made it plainly apparent that this policy has come too late, and that already the enlarged, and constantly enlarging capacity of the news print mills has created a serious situation in that something like a price war already exists, and that more than 20 per cent of the capacity of the mills is unutilized.

The view is now taken by the governing authorities that if the present unregulated state of affairs is allowed to continue the result is likely to be such a cutting of prices that one of the greatest natural assets of the Provinces concerned, namely the forests, will be sacrificed at a loss. A semi-official statement now going the rounds of the papers in regard to this week's meeting is that "The attitude of government authorities appears to be that the natural resources of the country shall not be depleted at a financial loss to the country. Sales of an enormous tonnage of news print at low prices would represent a national loss. This probably is why the Quebec and Ontario provincial governments are taking a hand in the matter."

This can be stated definitely to be the point of view of the Quebec Government, and the *Financial Post*, of Toronto, evidently speaks with knowledge of the Ontario Government's point of view when it says:

"It is thought possible that an attempt at the meeting may be made to place all the mills on a definite weekly operating basis—perhaps five days a week. If such a step were successful it would go a long way in improving the situation which is due entirely to the over-expansion of the various companies.

"If the premiers of Ontario and Quebec are successful in aligning most of the companies, they will be successful in aligning all. For no single news print company can afford to take steps frowned on by the governments involved, the reason being, of course, that all the companies are more or less dependent on timber cut on Crown limits. It may not be possible, though, to obtain an agreement among the leaders of the industry along lines suitable to the provinces of Ontario and Quebec.

"It is understood that the premiers of both provinces are ready to adopt any stabilization plan acceptable to the manufacturers."

Contract Awarded for N. B. Mill

The contract for the building of the newspaper mill at Dalhousie, N. B., for the International Paper Company, has been awarded in full to the Domill Construction Company of Canada, Ltd., head offices in Montreal. The cost will be about $15,000,000. Other bidders were Park-Lap Construction Company, Detroit; Foundation Company of Canada, Montreal; E. G. M. Cape, Montreal; Fraser, Bryce Engineering Company, Montreal, and W. I. Bishop Construction Company, Montreal.

The contract calls for a series of main buildings, ground wood pulp mill, sulphite mill, power plant, etc., with railway system some two miles in extent, conveyors, log stackers, stone breaker, etc., also considerable dredging work with the building of a dam.

K. O. Guthrie, of the successful tendering company, estimates that the work will be completed in 1929, some 1,000 men being employed with all material used being Canadian and all sub-contracts to go to Canadians.

The original plans call for a plant of 500 tons capacity but provisions are to be made to increase this to 750 tons if considered necessary in the future. The plant is to have the same capacity as the International mill at Three Rivers, P. Q.

The company has also acquired the entire western side of the main street of Dalhousie on which a bank building and the post-office is situated.

Machines Delivered to Spruce Fall Co.

The Dominion Engineering Works, of Montreal, has completed and delivered the order which it received from the Spruce Falls Power and Paper Company for four news print machines. Two of the machines are already in operation at the Spruce Falls plant at Kapuskasing, Ont., and the remaining two will begin to operate shortly.

By 1929 the capacity of the plant will amount to 550 tons of news print daily, about half of which will go to the *New York Times*, which owns a half interest in the company. The plant at that time will also have a surplus sulphite capacity of 95 tons a day, which has been contracted for by the Kimberly Clark Company. It is understood that at the present time most of the requirements of the *New York Times* are being supplied by the Canada Power and Paper Corporation from its Laurentide mill.

Price Bros. Get Timber Rights

Price Brothers Company has secured the timber cutting privileges in the upper basin of the Riviere aux Rats, in Lake St. John district, which were auctioned at the Parliament buildings in Quebec, during the week. The limits cover an area of 6 square miles and the Price company was the only one to make a bid, amounting to $3.20 per thousand feet for green timber and $2.10 for burnt timber per thousand feet.

Fine Paper Merger

It is stated that a new company is likely to be formed to take over various fine paper mills which have recently passed into the control of the Howard Smith interests in Montreal. The merger,

if carried through, may embrace the Howard Smith paper mills, though this is thought unlikely in some quarters, it being thought that the Lincoln Paper Mills, the Ritchie and Ramsay Company and the Georgetown Coated Paper Company may be absorbed by the recently incorporated Alliance Paper Mills.

With the entrance of C. Howard Smith and Harold Crabtree into the Lincoln, Georgetown, and Ritchie and Ramsay pictures, the fine paper business in Canada now lies largely in the hands of three groups.

Two of these are the Provincial and Rolland companies and third is the Howard Smith group. The Canada Paper Company, a subsidiary of the Canada Power and Paper Company, also operates in the fine paper field, but the management of this company is connected through interlocking directors with the Howard Smith Paper Mills.

The total production of the three mills to be taken over by the Alliance Paper Mills amounts roughly to 65 tons of pulp and paper products daily. There appears to be no intention of linking up the new company with the Howard Smith Paper Mills, despite the association of C. Howard Smith and Harold Crabtree with the larger producer.

Reduced Rates for Indianapolis

[FROM OUR REGULAR CORRESPONDENT]

INDIANAPOLIS, Ind., August 20, 1928.—Further reductions, making a total of approximately 20 per cent, in freight rates on printing, wrapping and other paper articles in carlots from Wisconsin mills to Indianapolis have been ordered into effect October 1, according to information received by Harry B. McNeely, traffic commissioner of the Indianapolis Chamber of Commerce. The Chamber of Commerce filed a complaint on behalf of the Standard Paper Company, the Crescent Paper Company and the Capital Paper Company, all jobbers of Indianapolis, last year. The interstate commerce commission, following hearings, recommended a reduction in rates of 10 per cent. The Indianapolis jobbers took exception to his report and won a greater reduction after oral argument before Division 5 of the commission.

According to Indianapolis jobbers, they have been severely crippled in their competition with St. Louis and Illinois jobbers by the present rate situation, and expect large benefits from the reduction ordered. While the distance from Wisconsin mills to St. Louis is 77 miles greater than to Indianapolis, St. Louis had a rate of 25 cents from the Fox River district, while Indianapolis paper houses paid 34 cents.

Evidence introduced by Indianapolis jobbers was to the effect that prior to increases in 1917, they had no difficulty in meeting the competition of St. Louis and Illinois jobbers in eastern Illinois, but as a result of the increase ordered in 1917, they have been entirely forced out of Illinois and at the present time do no business west of Crawfordsville, Ind., without absorbing freight.

Michigan paper mills, which were said to be responsible for the increase in the Indianapolis rate in 1917, bitterly contested any reduction in the rates to Indianapolis. The Wisconsin mills supported the contention of the Indianapolis plaintiffs, but opposed entering of an alternative order which would require rates to St. Louis and Indianapolis to be made the same.

United Paperboard Plant Damaged by Fire

INDIANAPOLIS, Ind., August 20, 1928.—Fire, believed to have started by spontaneous combustion, threatened millions of pounds of paper at the plant of the United Paperboard Company at Wabash, Ind., recently and kept firemen at the plant and in the fire department at the scene for seven hours fighting the flames. The loss is estimated at $10,000. It was necessary to move about 300 tons of paper to fight the fire, which originated under several big piles of paper in the wareroom. The loss is covered by insurance and will not necessitate the closing of the plant in order to make repairs.

Behr-Manning Corp. to Expand

WATERVLIET, N. Y., August 20, 1928.—Additional details of the expansion program of the Behr-Manning Corporation, now available, show that the program is one of the most extensive undertaken by an industrial concern in this section in years. While exact figures as to the cost are not available it is understood that several hundred thousand dollars will be expended in the construction of new buildings. The Morton T. Tuttle Company, of Boston, has been awarded the general building contract and has already started work.

The Behr-Manning Corporation, formed recently by a consolidation of the Herman Behr Company, Brooklyn, and the Manning Abrasive Company, this city, will have in the enlarged plant one of the largest in the country, producing abrasive papers. The present capacity of the local plant will be more than doubled with the erection of the new buildings. In addition to the office building for which ground was broken last week the structures to be added include a large manufacturing unit, a storehouse, machine shop, grading building and power plant. In addition a number of branch railroad sidings will be constructed linking the various units of the plant with the main line of the D. & H. Railroad.

The contract awarded to the Tuttle Company calls for the completion of the several new structures by the first of the year when the equipment of the Brooklyn plant of the Behr Company will be moved to Watervliet and with considerable new equipment will be installed in the completed buildings.

At the present time work is being concentrated on completing as soon as possible, the office structure which will accommodate the combined office forces of the Behr Company and the Manning Company, the latter organization now being located at the Green Island plant of the Manning Paper Company. This building is of brick construction, three stories high, 53 feet wide and 175 feet in length. It is costing $100,000 and will be ready for occupancy at an early date.

The present office building of the Manning Company at Green Island will be taken over by the recently organized Bank of Green Island as soon as the office activities are transferred to Watervliet. John H. Manning, president of the Behr-Manning Corporation, and head also of the Manning Paper Company, is one of the organizers of the new bank.

As soon as the new manufacturing facilities are available production of the Behr-Manning Corporation will be confined exclusively to Watervliet. The present Behr plant in Brooklyn will be discontinued when the machinery is moved to this city.

News Print Production for July

Production of news print in Canada during July, 1928, amounted to 184,199 tons and shipments to 181,834 tons, according to the News Print Service Bureau. Production in the United States was 110,313 tons and shipments 109,611 tons, making a total United States and Canadian news print production of 294,512 tons and shipments of 291,445 tons. During July, 19,287 tons of news print were made in Newfoundland and 1,369 tons in Mexico, so that the total North American production for the month amounted to 315,168 tons.

The Canadian mills produced 182,334 tons more in the first seven months of 1928 than in 1927, which was an increase of 16 per cent. The United States output was 64,859 tons or 7 per cent less than for the first seven months of 1927. Production in Newfoundland was 15,404 tons or 13 per cent more and in Mexico 748 tons more, making a total North American increase of 133,627 tons or 6 per cent over the first seven months of 1927.

During July the Canadian mills operated at 79.0 per cent of rated capacity and the United States mills at 79.5 per cent. Stocks of news print paper at Canadian mills totalled 48,270 tons at the end of July and at United States mills 40,386 tons, making a combined total of 88,656 tons which was equivalent to 6.0 days' average production.

Pennsylvania Paper Mills Prepare for Autumn

Manufacturers Gradually Bringing Operations to Normal Proportions, After Working On Curtailed Schedules During Summer Months—Philadelphia Distributors Receiving Inquiries For Larger Purchases for Future Deliveries—Demand for Paper Stock Light

[FROM OUR REGULAR CORRESPONDENT]

PHILADELPHIA, Pa., August 20, 1928.—As mid-August brings about preparation for the upward swing of industry in the coming Fall, the paper trade is sharing in an improved demand for the various lines of papers consumed by those enterprises that are most affected by seasonal changes. The larger manufacturing trades are in the market on a limited scale for many grades of paper that have been quietly drifting along. Now that autumn is in the offing the paper trade is expanding, though orders still lack normal seasonal activity. The slightly improved business situation encourages the trade to look for brighter times.

The future needs of the distributors in many grades of paper made in the Philadelphia manufacturing district, or contiguous territory, are now occupying the attention of manufacturers who are gradually bringing operations to normal proportions. Mills that were on curtailed schedule throughout the intense hot weather of early August are now near full time basis, after several weeks on five day schedule. Board mills and wrapping paper producers, during the major portion of the summer months confined to a cut week's employment, are broadening operation so that larger forces are engaged in from 75 to 90 per cent of capacity. Fine paper mills have been more active on many lines of printing grades.

As there is growing need for many lines of textile wrappings, kraft paper, and a long list of seasonally active paper stocks in specialties for hot weather consumption, the wrapping paper dealers are more optimistic. Tissues and crepe papers for sanitary product converters are in livelier movement, after a continued briskness in consumption throughout the early summertime. The prolonged hot spell of the early August days brought about a broader use of these products and despite the heavier traffic in these grades within recent weeks there is still a well maintained market in the local territory.

Distribution of paper is dragging along. The tendency of the consumers of paper in volume orders is to hold off pending some more definite trend of the market for the coming Fall. While orders are now for day to day needs among the larger printing and publishing concerns not supplied by contract, there are hopeful signs that this hand to mouth type of market is nearing an end, through inquiries for larger purchases for future deliveries. Mills are likewise experiencing a quieter trend in their local branches, where representatives are marking time until the autumn season's requirements awaken a buyers market.

As the mid summer dullness brings about a lagging trend for the mills the local trade is lingering along with duller times for paper stocks. There has been no noteworthy changes in prices, except in the book grades, which are lower than they were when the spring boom was on, and when prices were lifted to the highest levels of the post war period. When activity in paper stocks is experienced there will be higher prices, for accumulations are at a minimum, with none of the items in the paper stock list available in any quantities at warehouses. All supplies obtainable are taken despite the duller trend.

Paper Industries Expected To Increase Shipments

According to a report issued by the Atlantic States Shippers Advisory Board which met in convention in Atlantic City in the past month, it was estimated that there will be handled during the months of July, August and September approximately 1,110,239 freight cars, an increase of 3 per cent over the same period of 1927. These freight requirements were estimated upon commodity reports submitted at the quarterly meeting of the executive committee in session during the convention. Among the industries that were reported to require increased shipping facilities were the pulp and paper industry, which is expected to enjoy a growing business for the quarter, according to records shown at the session.

Harry A. Kornberg Takes Larger Quarters

Harry A. Kornberg, who conducts a twine, paper and specialty business, wholesale and retail, at 114 North 11th street, has extended his business since removing to larger quarters at this address. The firm formerly was located at 40 North 11th street in the adjoining square. With a view to developing the wrapping paper, bag and specialty business, the larger four story building now occupied was secured and adequate warehousing facilities provided.

Innovations For Glatfelter Mills Paper

Philadelphia distributors who feature the line of fine papers made by the P. H. Glatfelter Company, of Spring Grove, Pa., are now stocking for Fall the recently announced grades that have been subjected to changed schedule of production and improved quality. The Glatfelter Mills sent out during the early summer days an announcement to the dealers stating that certain grades of papers were to be standardized and the quality of these papers indicated according to changes and improvements made within recent times under special developments and processes in the plant laboratories. Local distributors of the Spring Grove Mills are now stocking the M. F. Book, Super Book, English Finish and Mimeograph grades under the newer quality specifications announced in the early part of the summer season. These grades are now marketed in higher quality of the Spring Grove M. F. Super Book, Spring Grove Egg Shell, No. 1 M. F. Super, C. R. Grade of Egg Shell, the newest lines that are being carried for the autumn requirements of the distributors of the P. H. Glatfelter Company. These papers, manufactured in nearby territory, are much in demand in the Quaker City and throughout the State.

Philadelphia Typothetae Protests State Paper Making

In the July Bulletin of the Philadelphia Typothetae commentary on the proposition made by a New York State politician that the Empire State produce its own paper in its own mill under convict labor regulation, urges the trade and the Graphic Arts industries to get behind those fighting the movement. In its comments on the proposed State owned paper making and printing plants the Typothetae Bulletin says: "Some politician has a bright idea that the State of Pennsylvania should own and operate its own printing office. There has been considerable done for and against this being done. Now another politician from New York has another bright idea. He advocates the State go into the manufacture of paper and that it own its own mill and use convict labor for the production of paper. For many years we have been fighting the government and trying to stop the printing of envelopes. They point out that they have been at it so long that they must keep on printing envelopes because the people expect it. And once the State begins printing its own jobs or making its own paper and entering the legitimate market it will be next to impossible to stop it. Every man concerned with the Graphic Arts industry should get behind those who are fighting these things and do his bit toward stopping the movement. We, the people, are to blame for many of the things politicians are getting away with. All we do is sit around and howl about it. We wait for George to do the work. But you, Mr. Printer and Mr. Paper Dealer, have a certain duty to perform, and if we will all do our duty, fight these things

as we should, the politicians would sit up and take notice. It is really up to us to remedy anything that is wrong with our industry."

To Build Power Plant For Southern Mill

A contract has been secured by the United Engineers and Constructors, Inc., of Philadelphia, with offices at Broad and Arch streets, for the construction and equipment of a $1,000,000 power plant for the Gulf States Paper Company, at Tuscaloosa, Ala. The plant will supply the process steam and electric power required by the paper company. The power plant will be located on the Black Warrior River. The design calls for one 7,500 kilowatt steam turbine and three horse power boilers. The boilers will burn pulverized coal.

Receiver For Endura Manufacturing Co.

Following the bankruptcy proceedings against the Endura Manufacturing Company, now located at Riegelsville, Pa., and formerly a Philadelphia concern, there has been appointed a committee to look after the settlement of the financial difficulties of the firm. The following have been appointed by the courts to adjust the business: Frederick S. Foulkrod, Ira C. Young and George F. Moxley. The bond has been fixed at $20,000. The trio appointed are involved in the settlement of the involuntary bankruptcy proceedings as representatives of the creditor concerns filing the petitions against the company. The involuntary proceedings were instituted in the United States District Court here in late July. The creditors filing the petition are Hughes, Foulkrod Company, $9,167; F. W. Tunnell and Co., Inc., $2,516, and the West Jersey Paper Manufacturing Company, $2,993. The Endura Manufacturing Company, which formerly was located at Washington avenue and 11th street, removed to the old Durham Paper Company Mills, located at Durham, Pa., in Bucks County, over a year ago. After remodeling the mills and installing the necessary units and machinery for the modernizing of the plant the firm engaged in the production of its own line in natural and colored specialties, beaming fibres, express and index, bristol, and press boards, red rope papers, stencil, cartridge, chocolate layer board, and other grades used by the automobile trades. The financial difficulties were coincident to the remodeling of the mills to meet the requirements of its own lines. The officers of the company are President, R. E. Scherr; Vice President, E. McCafferty; and Secretary and Treasurer, A. K. McCullagh.

L. Resnick & Sons File Registration Certificate

L. Resnick & Sons, 535 South 60th street, now engaged in the sale of wrapping papers, bags, twines and other specialties in the coarser grades of papers, has filed certificate of registration with the Common Pleas for the conduct of its business, as required under the laws of Pennsylvania. Those who have filed as members of the firm recently opened at the South 60th street address are: Joseph Resnick and Charles Resnick, sons of L. Resnick, head of the concern.

Brown & Bailey Now In New Home

The Brown & Bailey Company, one of the oldest and largest of fibre and folding box manufacturers and corrugated papers product converters in the Quaker City, has removed to its very modern and just completed factory building constructed for its own use at 817-25 North 8th street. The new quarters are of the most modern fire-proof, daylighted type of factory structure, with five stories, constructed with brick spandrel walls, cast stone sills and coping. Modern electrical elevators, conveyors and safety devices have been installed, while many new mechanical units for the production of its various lines of paper products have been added for the extension of business. The firm, for more than forty years, was located at 417 North 8th street, just a few squares away. It was one of the pioneer firms to establish a welfare service in its factory for the development of proper working conditions and aid to its employees. In the new quarters are provided rest rooms and recreation quarters for the workers.

Wins Part Victory in Freight Rate Case

ALBANY, N. Y., August 20, 1928.—Despite efforts of the Green Bay, Wis., Association of Commerce and the Wisconsin Paper and Pulp Manufacturers Traffic Association to block it and despite the claim of the New York Central railroad that granting its request would result in disruption of a class rate adjustment in trunk-line and New England territory, the National Paper Products Company, Carthage, N. Y., today is part winner in its freight rate fight which means the opening of new territory to it for business.

The Interstate Commerce Commission has just handed down a decision decreeing that existing rates on paper towels from Carthage and Watertown, N. Y., are not unreasonable but are unduly prejudiced in favor of Green Bay and Wisconsin paper products producing points. The "undue prejudice" is ordered removed whereby the New York company is given rates sufficiently low in the commission's opinion for it to compete in territory that hitherto has been enjoyed exclusively by Green Bay and other paper producing sister cities.

The decision is the latest move in the fight of the Northern New York paper producers to get their products into central and trunk-line territory and means increased business for this section and a possible tendency of the commission to open the doors of the Northern New York companies to the territory which the Wisconsin producers are alleged to have held so long by reason of the alleged freight rate discrimination.

The railroads contended that since several of the alleged preferred points, including Chester, Greenwich, Berlin and Green Bay, were not included in the proceedings as defendants the commission had no jurisdiction over the case. The commission, however, ruled that it did have jurisdiction. The Carthage Company asserted that it was necessary to make freight allowances in order to compete with other manufacturers but it admitted its sales in central territory have increased with the last few years despite the alleged discrimination against it. During the year 1925 it made 142 shipments aggregating more than 4,000,000 pounds and averaging 28,412 pounds to all the destinations.

The commission said that the railroads earn more per mile from Carthage than from any of the competitive points with the exception of Green Bay. The rates from Carthage are from four to nineteen cents higher than the corresponding rates from Albany to equidistant points, the commission ruled.

Indianapolis Paper Demand Fair

[FROM OUR REGULAR CORRESPONDENT]

INDIANAPOLIS, Ind., August 20, 1928.—In spite of the extremely hot weather and the fact that vacation season is at its height here at the present time, business with the paper jobbers seems to be fair. August is expected to show well as compared with the same month last year, though no very noticeable gains are expected. It is interesting to note that the demand, while small for individual items, yet is rather general through the entire paper range. Regardless of the fact that this fall will see the campaign at the front, the paper men here are expecting a much better fall than last fall. One of the principal reasons for this is the certainty that the farmer will have more money than he had last fall.

Several of the local jobbers are expecting some slight increase in prices particularly in the better grades of papers. Demand for wrapping papers has held up rather well in view of the season and judging from expressions of optimism from the larger merchants here, the demand will increase sharply during the first of September when fall trade actually commences.

Demand this summer for building papers has been very poor due chiefly to the lack of building in the rural communities, but this situation is expected to be remedied when the fall season opens. Some demand is seen for paper board and most of the box factories report a good outlook for fall. Confectioners are taking their requirements of glassine stock and are beginning to become interested in the vogue for Christmas boxes and wrappings this year.

Paper Demand Fairly Satisfactory in Toronto

Distributors Receiving Extensive Requisitions for Fine Papers from Printing Trade—Bonds, Writings, Book and Ledger in Excellent Request — Good Call Experienced for Coated Stock—Paper Board Mills Operating at 75 Per Cent of Capacity

[FROM OUR REGULAR CORRESPONDENT]

TORONTO, August 20, 1928.—A satisfactory volume of business is being maintained both in the manufacturing and wholesale sections of the paper industry in Ontario, despite the holiday season, which has affected the trade to a considerably less degree this season than last. This is taken as an augury of continued and increased activity during the fall months. Practically all paper consuming sources are active. The printing trade, for instance, is quite busy and is making extensive requisitions for fine papers. There is a good call for bonds, writings, book and ledgers from the printing and converting trades and book paper mills continue to be booked up with orders for the next month and a half or two months. There is also a good call from catalog and publishing houses for coated stock which has kept the coated mills quite busy during the spring and summer months. Envelope manufacture has suffered to some extent during the summer season but there are signs of revival in trade in this line and a good fall business is anticipated.

The coarse paper market is a little less active than it was earlier in the season but a fair business is being done both by the mills and the jobbers, while there is also a fair call for paper bags, especially flour sacks. Manufacturers of grease proof, waxing and glassine papers report a steady demand for their product and all sections of the light weight paper manufacturing business are busy under a good demand for tissues, toilets and specialty lines. The near approach of the Canadian National Exhibition has stimulated the paper and printing trades, for the big annual two-week show is always responsible for the consumption of a tremendous amount of paper and printer's ink. The paper box industry throughout the province is in a prosperous condition, with a good demand for all lines of folding and set-up boxes. Plants making material for the box trade in the form of box board are operating well over 75 per cent capacity and are getting lots of business from the paper box industry. Waste paper dealers report a strong market, with the mills absorbing all the stock they can procure.

New Machine Now Running

The new machine of the Great Lakes Pulp and Paper Company, at Fort William, Ont., started running a few days ago. The grinding of pulp has been resumed in the original pulp plant. The preliminary tests have been most satisfactory and the first machine will turn out about 125 tons of news print daily. At the start of news print manufacture broken pulp will be ground in the old pulp mill of the plant. In the meantime work is being pushed ahead at a fine rate of speed on the new pulp mill, which will be about one and a half times as large as the existing mill. The iron work on the new plant has been completed and the structure will be finished in time to start operations this fall. More than eight hundred workers are engaged on construction of the new plant of the Great Lakes Pulp and Paper Company. The foundation of the large new sulphite plant has been completed. Part of the second news print machine, which is 304 inches wide, has arrived and the machine is the largest paper unit in Canada. It is expected that the installation of the machine will be finished some time in January and that it will start running early next spring. Next spring it is planned that work will start on the new paper mill to house a couple more machines.

Espanola Mill Won Safety Trophy

The formal presentation of the Ontario Pulp and Paper Makers' Safety Association shield and banner to the Espanola mill of the Spanish River Pulp and Paper Mills, Ltd., took place a few days ago in the community hall at Espanola. The shield and banner are emblematic of the best record in accident prevention, given by the association to the mill which has the best record for the year. The record of the Espanola mill was 36 days lost time per 1,000. A. P. Costigane, secretary-engineer of the association, was on hand to make the presentation on behalf of his organization and a large number of employees were in attendance. Among those taking part in the proceedings were W. J. Hussey, general superintendent of the mill; Mrs. E. Britton, plant nurse; D. B. Chant, secretary of industrial relations; Rev. Father Brennan, Rev. H. Hutton, F. Williams, of the Paper Makers' Union, and Mr. Cadieux, of the Pulp and Sulphite Union. The presentation of the trophies was made by Mr. Costigane to Mr. Hussey in a speech in which he outlined the aims and objects of the association and congratulated the Espanola mill on its success in topping the list in the contest.

Waxed Paper Men Hold Annual Meeting

The American Waxed Paper Manufacturers held their annual convention at Hamilton, Ont., a few days ago, when various problems connected with the industry were discussed. The Appleford Paper Products, Ltd., of Hamilton, of which W. B. Powell is manager, acted as hosts to the manufacturers from across the line, for whom a most enjoyable program, from a social standpoint, had been arranged. Among those present at the meeting were: J. T. O'Rourke and Emile Frisch, of the American Bread Wrapper Company; W. B. Powell, of the Appleford Paper Products, Ltd.; A. F. Gluck, of the Coated Paper Products Company; R. B. Donnelly, of the Central Waxed Paper Company; J. D. Goldberg, of the Hammersley Manufacturing Company; R. A. Hayward, of the Kalamazoo Vegetable Parchment Company; G. H. Gardiner and E. A. Meyer, of the Menaska Printing and Carton Company; E. A. Clark, of the Nashua Gummed and Coated Paper Company; W. J. Eisner, of the Newark Paraffin and Parchment Paper Company; A. Palmer, of the Ohio Waxed Paper Company; B. H. Ballard and C. Donohue, of the Warren Manufacturing Company; C. R. Wright, of the Waterproof Paper and Board Company; Carl Zimmer, of the Ostego Waxed Paper Company; E. Marshall, of the Nashua Gummed and Coated Paper Company (Canadian Division); S. J. Frame, secretary of the Canadian Waxed Paper Association; H. H. Turner, of the Deframe Paper Company, Niagara Falls; W. H. Howe, of the Mumford Paper Mills; E. W. Kelly, of the Union Waxed Tissue Paper Company; F. D. Jones, of Davies, Jones & Beebe, and P. S. Hanway, manager of the American Waxed Paper Association.

Big International Program in New Brunswick

Further details have been made available in Toronto regarding the huge paper mill which will be constructed by the International Paper Company at Dalhousie, N. B., by the Domill Construction Company of Canada, Ltd., at a cost of $15,000,000. K. O. Guthrie, president of the construction company, who, with his general superintendent, J. R. Nichols, of Montreal, was inspecting the site of the development, said he had been officially notified of the award and expected to commence operations before the end of the present month. The contract calls for a group of main buildings known as the paper mill, the sulphite mill, the power plant and the slasher mill, and in addition to these there will be two railway sidings about two miles in length, the conveyor system, the log stackers, stone breaker, some 1,200 feet in length, and several miles of fire pipe. Considerable dredging work will entail the drawing of material from the river bed with which to fill the site of the main

plant and the large dam to be erected on the north branch of the Charlo River from which terminals of pipe will be laid, through which fresh water will be carried to the mill.

Mr. Guthrie said the bare construction work would require about twelve months, and the entire building and construction would be completed in the spring of 1930. Over 1,000 men will be employed during construction, it being the policy of the company to draw on local labor wherever possible. All the material used in the construction work will be Canadian and in the matter of sub-letting such portions of the contract as are necessary, these will be given to Canadian contractors, said Mr. Guthrie.

The contract for dredging will be sub-let, and is a most important factor, as a space roughly estimated at 50 acres requires filling in with material from the river bed and brought in through a two-foot suction pipe over a distance of 800 yards. This material will be held on the filling ground and prevented from being carried away by the rise and fall of the tide by means of a stone breakwater, extending from the rocky point above the Government pier to the southeastern peninsula of the company's property, a distance of 1,200 feet. It is understood the dredge to be employed at the work will have a capacity of pumping 8,000 cubic yards of material per day. Specifications of the contract call for foundations of concrete and superstructures of steel and brick. "The plant is designed and will be built along the most modern lines, and, in my opinion will be one of the largest of its kind in Canada," said Mr. Guthrie.

It is understood that several new features will be introduced. Questioned as to the ultimate capacity of the plant he said that while the original plans called for a 500-ton mill, provision would be made so that in the event of future expansions two more machines could be installed, thus bringing the total daily capacity to 750 tons. In the event of the additional machines being installed it will mean that the Dalhousie plant would have the same capacity as the International mill at Three Rivers, Que., which is conceded to be the largest and most modern plant at present in Canada.

The construction program for 1928 will be the laying of the concrete foundations and the dredging work. A large construction camp will be erected on the site in which to house the workers during construction, but regarding the feeding, clothing or equipping the men with their personal needs, Mr. Guthrie made it clear that in no way would his company compete or interfere with local merchants or trades people and they did not intend to open a company store or dining rooms.

Hydro Gets New Power Next Month

Delivery of the first block of power to the Hydro-Electric Power Commission of Ontario by the International Paper Company from the company's new plant on the Gatineau River will commence on October 1. This announcement was made a few days ago by A. R. Graustein, president of the International Paper Company, who says that the company's construction program on the Gatineau is now nearing completion. This program, embarked upon in October, 1925, involves, he says, one of the world's largest storage reservoirs; three hydro-electric power stations built for a total installation of 562,000 hp., of which 436,000 hp. are now installed or about to be installed, and a considerable mileage of high-tension transmission lines.

Notes and Jottings of the Trade

H. A. Goldsbrough, of the Hodge-Sherriff Paper Company, Ltd., Toronto, has gone on a business and pleasure trip to England and will visit his old home while there. W. S. Hodge, of the Company's Montreal office will spend about ten days in Toronto covering the Western Ontario district.

T. L. Crossley, of the Industrial Laboratories, Toronto, is back again at his desk after a ten days illness. Mr. Crossley, who in addition to his other duties, organizes educational work among the Canadian and United States pulp and paper mills, will leave shortly for Maine where he will spend some time among the mills in that state.

A recent visitor to Toronto was A. E. H. Fair, vice-president and general manager of the Windsor Locks Paper Mills Company, at Windsor Locks, Conn., which is controlled by Arthur D. Little, Inc., of Cambridge, Mass. Mr. Fair was formerly connected with the Lincoln Pulp and Paper Company at Merritton, Ont.

Norman Hampshire, of the J. C. Wilson Company, wholesale paper merchants, Montreal, was calling on the Toronto paper trade a few days ago.

The many friends of Samuel J. Moore, Toronto, are congratulating him on the recent celebration of his sixty-ninth birthday. Mr. Moore is one of the leading financial and industrial captains in Canada and started life as a printer at Barre, Ont. Today he is chairman of the board of the Pacific Burt Company, the F. N. Burt Company, the American Sales Book Company, the Gilman Fanfold Corporation and other bodies.

It was announced at the head office of Provincial Paper, Limited, in Toronto, a few days ago, that Arthur Jewett, who for several years has had charge of the Montreal office of the company, would return to Toronto and take the place vacated by N. E. Wainwright, who has purchased the Don Valley Paper Mills, and who handled the Port Arthur output of Provincial. K. G. Toy, of the local staff will go to Montreal to take charge of the office there. Mr. Toy is now holidaying in New York and Pennsylvania.

J. G. Sutherland, of the Mead Sales Company, Dayton, Ohio, was a business visitor in Toronto a few days ago.

Twenty years ago the Brampton Paper Box Company established its business in Brampton, near Toronto. Today the company manufactures all kinds of high-grade set-up boxes. Because of the fact that the town is prominent as a center for the manufacture of shoes, there is naturally a demand for boxes for the products of these industries. The company therefore specializes in the manufacture of shoe boxes and large quantities are supplied each year to the various manufactories there. The business has undergone considerable expansion of late.

Presentations To Ward M. Smith

[FROM OUR REGULAR CORRESPONDENT]

PHILADELPHIA, Pa., August 20, 1928.—Recent Ward M. Smith has resigned as superintendent of the Philadelphia Division of the Container Corporation of America. In his thirty years of work at this plant, which prior to July 1, 1926, was the Philadelphia Paper Manufacturing Company, he has seen production grow from 9 tons a day to over 550 tons a day. This great progress has not only been made during Mr. Smith's time but he has been very largely responsible for it. As a paper maker it is generally known in the trade that he is one of the most highly regarded not only for his actual knowledge but for his handling of general plant problems. His loss will be very sorely felt not only by the company but by each individual employee.

At the time of his retirement, the employees presented to him a beautiful chair, with which a letter reading as follows was sent:

May this chair which we of the Container Corporation of America, Philadelphia Division, (formerly Philadelphia Paper Mfg. Co.) present to you, Ward M. Smith, at the time of your retirement give you some of that rest and comfort well earned by over thirty years of unceasing labor for the advancement of the plant as a whole and of each individual associate. May it furthermore express in some small measure our appreciation of your kindly, helpful and manly qualities.

In addition, a silver set, consisting of military brushes, comb, nail file, shoe horn, clothes brush and a traveling clock, was presented, the inscription being as follows:

This set from the employees of the Container Corporation of America, Philadelphia Division, formerly Philadelphia Paper Mfg. Co., is a small token of the affectionate esteem of each man and woman of this plant for Ward M. Smith who for over thirty years as superintendent gave unstintingly of his talents and thoughtful cooperation.

Chicago Paper Trade Anticipates Active Fall

Enthusiastic Reports Received by Local Paper Merchants Denote General Expansion of Business in the Near Future—Spotty Condition of News Print Due to Heavy Production—Fine Paper Market in Better Position Than at This Time Last Year

[FROM OUR REGULAR CORRESPONDENT]

CHICAGO, Ill., August 20, 1928.—The last of the hot vacation months finds Chicago paper merchants busy clearing the decks for the action that is confidently expected for the fall months. Reports that have come in during the past twelve weeks have all been tinged with the proper amount of enthusiasm in spite of the heat and vacation absences.

The news print market is reported as steady although comments have been made by various executives that would indicate a somewhat spotty condition, due, for the most part to an unusually heavy production rather than to lack of demand. The book and cover paper markets are quiet and there is little activity to report with the exception that paper men expected the seasonal dullness and look favorably on conditions for fall business.

Leading members of firms in the wrapping paper field find that this line picked up appreciably in the last week foretelling what is expected to be a satisfactory fall business. The market is sound. The fine paper trade cannot be said to be moving ahead very fast. The market is said to be better than at this time last year but, in spite of this encouraging condition, there is no great activity. However, business is expected to improve in the next three or four weeks.

Chicago Paper Association Outing

The Chicago Paper Association had a great time at its annual outing held at the Butterfield Country Club, August 15. Thirty-five men participated in the various indoor and outdoor sports, twenty-five members of the association and ten guests. Nine holes of warming up golf were played in the morning, followed by eighteen holes of mighty keen competition in the afternoon. A luncheon at 1 o'clock and a splendid dinner at 6:30 took the edge off of a bunch of healthy appetites. A restricted speaking program was carried out following the dinner—the program was short, snappy and interesting.

Prize winners were as follows: William Rauth, of Rauth Brothers Paper Company, was the winner of the first low gross prize, while E. H. Allen, a guest, won the first low net honors. Second low net went to Joseph Murnane, of the Murnane Paper Company, popular secretary of the association. Third low net honors were taken by Sam Inlander, of the Inlander-Steindler Paper Company and the prize for second low gross was won by Robert Eichenlaub, of the Beaver Paper Company.

In commenting on the outing, Leo Altholz, president, said, "It served as a repetition of the fine spirit of fellowship and comradeship evidenced by the members of our association. These affairs certainly are worthwhile in promoting this valuable spirit."

Mr. Altholz also announced the next meeting of the Chicago Paper Association for August 28, to be held at the Bismarck Hotel. An interesting program has been arranged.

Salesmen's Association Activities

H. R. Knott, Eastern Manufacturing Company, president of the Chicago Division of the Salesmen's Association of the Paper Industry, reports that the next regular meeting of the association will be held at the Hamilton Club, on the first Monday following Labor Day. A feature of the opening meeting of the new season will be the talk to be given by Dr. Craig Gordon Stewart, of Evanston, chaplain of the Salesmen's Association of the Paper Industry. A big crowd is expected to hear Dr. Stewart, who is one of the most interesting and forceful of speakers.

The final golf outing of the year will be held at the Wilmette Country Club, September 13, and the many enthusiastic golfers of the association will have a last opportunity to "come through" or wait until next year.

Paper salesmen of Kalamazoo, Mich., had an opportunity to entertain the association at its last golf outing held at the Kalamazoo Country Club, August 16. Twenty-four salesmen availed themselves of the opportunity to try out the Kalamazoo course with the following interesting results: James Grinling of the Allied Paper Company, was the winner of the low gross trophy. A guest, Mr. Gilkey, was the winner of the low net prize. Herb Nichols, of the Northern Paper Mills, won honors for low putts on the first nine holes, while Ray Russell, of the Marathon Paper Company, won honors for low putts on the second nine. The *American Paper Merchant* offered a prize for shots sunk from off the green and the only winner in this class was Walter Cox, of the Paterson Parchment Paper Company.

George Tolen Seriously Injured

George Tolen, of the Midland Paper Company, met with a serious accident August 16, while on his way to Ann Arbor, Michigan. Although details of the accident are incomplete at this writing, the offices of the Midland Paper Company learned that Mr. Tolen, accompanied by his wife and two daughters, was driving his car on the beginning of a long-looked-forward-to vacation. The car was hit by a truck and turned over three times. Mr. Tolen's back was dislocated and, at the time the report was given, was paralyzed from the hips down. His wife and daughters were not seriously injured. The Midland Paper Company executive was rushed to the University Hospital at Ann Arbor, and his many friends in Chicago are anxiously awaiting for further reports as to the extent of Mr. Tolen's injuries.

News of the Trade

The S. D. Warren Company has recently issued some direct mail advertising stressing what the return of the one cent rate on private return post cards can mean to business in general. A series of pulling return cards are printed in the folder, illustrating the possibilities of the cards and offered as ideas for any one wishing to use them. Inserted in the folder is a 7 x 10 page printed on Warren's "Silkote" post card of dullo-enamel (white). The theme, throughout the piece of direct mail is "More Business through Illustrated Business and Return Cards."

E. L. Walters, of the Western Paper Company, Omaha, Neb., spent several days in Chicago recently, transacting business with Chicago paper men.

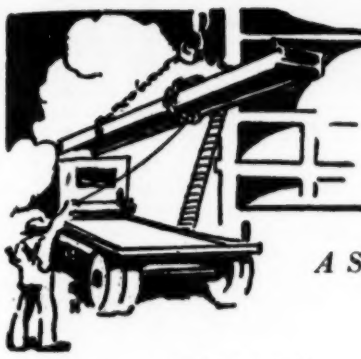
E. R. Jones, secretary of the Kansas City Paper House, Kansas City, Mo., was in Chicago several days last week. Mr. Jones had not been in Chicago for some time and the formerly frequent visitor to this city was warmly welcomed by his many friends.

C. E. Schoff, president of the San Antonio Paper Company, San Antonio, Texas, together with his wife and daughter, spent several days in Chicago, en route to St. Joe, Mich. Following the termination of their visit here the Schoff family went to Spirit Lake, Iowa, to enjoy a three weeks' vacation along the shores of Spirit Lake and the Okoboji's.

Hampshire Paper Co. Resumes Operations

[FROM OUR REGULAR CORRESPONDENT]

SOUTH HADLEY FALLS, Mass., August 21, 1928.—The Hampshire Paper Company resumed operations yesterday after a three weeks shutdown. During this period alterations were made in the finishing room and one part of the machine room.



CONSTRUCTION NEWS

A Summary of Vital Facts Regarding Construction, Finances and Operation of Paper Mills

Construction News

Baltimore, Md.—The Chesapeake Paper Board Company, Key Highway, has asked bids on general contract for a new addition to its mill, to be one and two story, reported to cost in excess of $250,000, with machinery. It is purposed to begin superstructure at an early date. Karl A. Lefren, 171 Madison avenue, New York, is engineer. J. E. Smith is president.

Lawrence, Mass.—The Champion International Company, Canal street, has completed plans for a new one story addition to its pulp mill, to be one story, 55 x 240 feet, brick and steel, reported to cost close to $115,000, with equipment. General building contract has been let to L. E. Loche & Son, Bay State Building, Lawrence.

St. Louis, Mo.—The Hinde & Dauch Paper Company, Sandusky, Ohio, manufacturer of corrugated containers, etc., has concluded negotiations for purchase of plant and business of the Standard Corrugated Box Company, 5110 Penrose street, St. Louis, and will take possession at early date. The company will be merged with the organization of the purchasing company. It is understood that Standard plant will be continued in service as a branch works, and that expansion program will be carried out.

Andover, Conn.—The Case Board Company, manufacturer of fiber board products, is said to be considering early rebuilding of the portion of its mill destroyed by fire, August 15, with loss reported at close to $75,000, with equipment and stock. Christopher C. Case is one of heads of the company.

McConnellsville—The Blossvale Manufacturing Corporation, recently organized by Clarence C. and Harry A. Harden, McConnellsville, is planning early operation of a plant in this vicinity to manufacture paper goods of various kinds. The new company is capitalized at $50,000. Richard J. Larkin, Rome, N. Y., is attorney for the organization.

Chicago, Ill.—The Container Corporation of America, Inc., 111 West Washington street, is said to have awarded a general contract to Blauner & Davies, 1528 North Claremont avenue, for a new addition to corrugated paper board mill on Ogden avenue, to cost more than $600,000, with machinery.

Boston, Mass.—The Tileston & Hollingsworth Company, 211 Congress street, has begun the erection of a new addition to its mill and warehouse on River street, Hyde Park district, reported to cost close to $100,000, for which general contract recently was let to the Morton C. Tuttle Company, Park Square Building, Boston, engineer and contractor.

Cambridge, Mass.—The Chaton Fiber Company has leased property at 27 Tudor street, comprising one story buiding and site of about 10,000 square feet, and will occupy for a plant. Extensions and betterments will be made and necessary equipment provided at early date.

High Point, N. C.—The Carolina Containers, Inc., recently organized by Charles T. Ingram, High Point, and associates, is said to have plans under way for establishment of new local plant for the manufacture of paper and cardboard containers, boxes, etc., and proposes to develop extensive capacity. The new company is capitalized at $200,000. Jefferson Penn, Reidsville, N. C., is also interested in the concern.

Baltimore, Md.—The Chesapeake Waste Paper Company, 410 North Guilford avenue, is considering rebuilding of portion of its warehouse and distributing plant destroyed by fire, August 15, with loss reported at $90,000, including building, equipment and stock. It is understood that operations will not be affected as a result of fire.

Brooklyn, N. Y.—The Acme Abrasive Company, Inc., recently formed by Nathan Marks, 363 Oak avenue, Brooklyn, and associates, with capital of 1200 shares of stock, no par value, plans operation of a local plant for manufacture of sandpaper and kindred products. Lloyd B. Kanter, 1409 Mansfield place, Brooklyn, is also interested in new company.

Boston, Mass.—The Gatti Paper Stock Corporation, 41 East 42nd street, New York, waste paper goods, has concluded negotiations for purchase of warehouse and business of the John A. De Vito Company, Station and Halleck streets, Roxbury, Boston, and will consolidate with its organization. It is understood that present DeVito warehouse and distributing plant will be maintained in addition to similar warehouse of the purchasing company at 45 Pittsburg street, Boston.

Philadelphia, Pa.—The Fibre Board Products, Inc., San Francisco, Cal., operating the Federal Container Company, 56th street and Paschall avenue, Philadelphia, recently acquired, is said to be arranging an early call for bids on general contract for its proposed new corrugated board mill to be constructed in the Philadelphia district, for which plans are being drawn by V. D. Simons, 435 North Michigan avenue, Chicago, Ill., mill engineer.

Huntington, Conn.—The Latrobe Paperboard Company, Latrobe, Pa., F. B. Oldham, president, has taken over the former plant of the Chester Paper Company, Huntington, and proposes the reopening of the mill at an early date. It is understood that an improvement program will be carried out, including installation of additional equipment.

Pueblo, Colo.—A paper manufacturing company with mill at Appleton, Wis., name temporarily withheld, is said to have negotiations under way with Pueblo Commercial Club for the establishment of a new local mill. It is said that a site will be selected at an early date and plans prepared for initial units. Estimated cost has not been announced. P. A. Gray, secretary of the Pueblo Commercial Club, has information regarding the project.

South Walpole, Mass.—The Bird Machine Company, South Walpole, manufacturer of paper mill machinery, has completed plans for a new one story addition to its plant and will proceed with erection at an early date. Estimated cost has not been announced.

Alton, Ill.—The Illinois Carton and Label Company, Broadway and Washington street, recently organized with capital of $100,000, will operate a local plant for the manufacture of paper cartons and boxes, and kindred paper goods. Extensive production is planned. The company is headed by W. E. Levis and E. J. Verlie.

Toronto, Ont.—The Canadian Paperboard Company, foot of

Carlaw avenue, has filed plans for the construction of a new mill on Commissioners street, with main unit, one story, 162 x 255 feet, and auxiliary structure for storage and distributing service, one story, 70 x 320 feet. Entire project is reported to cost in excess of $250,000, with equipment. General contract has been let to W. J. Trumble, 73 Adelaide street, West, and work will be placed under way at once.

Seattle, Wash.—The Pacific Straw Paper and Board Company, Long View, Wash., has work under way on its proposed new factory branch and distributing plant at 2942 East Marginal Way, Seattle, to be one-story, 75 x 80 feet, for which general contract recently was let to C. J. Strandberg, 5633 Fifth avenue, N. W., Seattle, and will soon occupy.

New Companies, Etc.

New York, N. Y.—The Arthur P. Jackson Company has been incorporated with a capital of $10,000, and 200 shares of stock, no par value, to manufacture and deal in fine papers, stationery, etc. Incorporators are Arthur P. Jackson and C. P. Kingsley, 60 Broad Street, New York. Last noted is representative.

Wilmington, Del.—The American Sealkap Corporation of Delaware, care of the Corporation Trust Company of America, duPont Building, Wilmington, has been incorporated with a capital of 1000 shares of stock, no par value, to manufacture paper caps for milk bottles and similar service.

Green Bay, Wis.—The Northern Paper Mills, Inc. has filed notice of increase in capital from 66,250 shares of stock, no par value, to 75,000 shares, with preferred stock remaining at $130,000, as heretofore; increase will be used for general expansion.

Kalamazoo, Mich.—The Sutherland Paper Company has arranged for an increase in capital from $1,750,000, to $3,000,000, for general expansion and development.

Richmond, Va.—The Caukenell Bag Corporation has been incorporated with a capital of $100,000, to manufacture paper bags and containers. M. Wallace Moncure, Jr., Mutual Building, Richmond, is the principal incorporator.

Brooklyn, N. Y.—The American Carton Corporation, 160 John street, has filed notice of increase in capital from $85,000 to $110,000, a portion of proceeds to be used for expansion.

Gary, Ind.—The Wholesale Paper, Confectionery and Tobacco Company has been incorporated with a capital of $10,000, to deal in paper products, writing papers, etc. The incorporators are Myer Ross and Joseph Lozaw, both of Gary.

Detroit, Mich.—The Detroit Paper Sales Company, Detroit, has filed notice of increase in capital from $30,000 to $100,000, for general expansion.

Boston, Mass.—Officials of the New England Calendar Company, 20 Sudbury street, have filed notice of organization of a new company to be known as the Advertising Calendar & Novelty Company, to manufacture a line of paper goods.

Brooklyn, N. Y.—The Hunt Modern Paper Products, Inc., 4014 First avenue, has filed notice of increase in capital from $200,000 to $300,000, for general expansion in operations.

Three Rivers, Mich.—The Egg-Safe Manufacturing Company of Michigan, Inc., has been incorporated with a nominal capital of $5,000, to manufacture and deal in corrugated and cardboard fillers for egg cases and other containers. The incorporators are Melvin C. Pierce, Three Rivers; and David M. Russell, 5520 South Shore Drive, Chicago, Ill.

New York, N. Y.—The Beacon Paper Box Company, 98 Greene street, has filed notice of increase in capital to $20,000, for expansion.

Niagara Falls, N. Y.—The Kimberly-Clark Company, Neenah, Wis., operating paper mills in United States and Canada, has filed a mortgage at the office of the county clerk, Lockport, totaling $20,000,000, in favor of the First Wisconsin Trust Company, securing a bond issue to be made in installments.

Albany, N. Y.—The Potter Taylor Paper Corporation, Albany, has arranged for an increase in capital from 450 to 2,000 shares of stock, no par value.

Chicago, Ill.—The Sell-Rite Case Company, 209 South State street, has been incorporated with a capital of $10,000, to manufacture and deal in paper containers of various kinds. The incorporators are M. J. Harford, A. B. Hurtgen and J. R. Childs.

Boston Paper Trade Happenings

[FROM OUR REGULAR CORRESPONDENT]

BOSTON, Mass., August 20, 1928.—Besides lines recently noted, Rutter & McNaught, Inc., have added Sebo Writing and krafts and manilas made by the Hollingsworth & Whitney Company.

H. P. Osgood, of the Howard Paper Company, reports considerable activity in waxed paper, made by the Package Paper Company.

Francis W. Breed, Jr., of the Howard Paper Company, is securing a large volume of orders from candy manufacturers for waxed glassine and feels that there is a very good future for business in this commodity.

Charles A. Esty, of the C. A. Esty Paper Company, has returned to his home at Framingham after a month's vacation at Orr's Island.

Edward D. Bement, manager of the Boston branch of the C. A. Esty Paper Company, is at his summer residence, Fandore, Pocasset, Mass., for a vacation.

Floyd Blackman, secretary of the D. F. Munroe Company, is at Chichester, N. H., with his family, for a two weeks' vacation.

J. K. Horsburgh, of R. & W. Watson, Ltd., Linwood, Scotland, is at the Ritz Carlton, coming here from a trip in Canada. Mr. Horsburgh is the inventor of the Horsburgh Multiple Fourdrinier Wire Machine and a recognized expert on rope manila papers.

C. S. Hall, manager of the envelope department, F. B. Hoffses, of the card department; and E. H. Little, buyer and custodian of cover papers, all of John Carter & Company, Inc., are on their vacations.

Roger S. Hubbard, salesroom manager for John Carter & Co., Inc., has returned from a vacation at Mountain View, Whitefield, N. H.

H. H. Rutter, of Rutter & McNaught, Inc., is on Cape Cod for a vacation.

Horace B. Sargent, manager, E. Butterworth & Co., Inc., accompanied by Mrs. Sargent, left Saturday, August 18, for a motor trip to the Weirs and Lake Winnipesaukee, N. H., and Maine.

F. Bendel Tracy, treasurer of the Fort Hill Paper Company, has been passing a two weeks' vacation at Rye Beach, N. H.

W. J. McLellan, purchasing agent for Carter Rice & Co. Corp., is at the Englewood, West Yarmouth, for two weeks.

Finnish Paper Market Dull

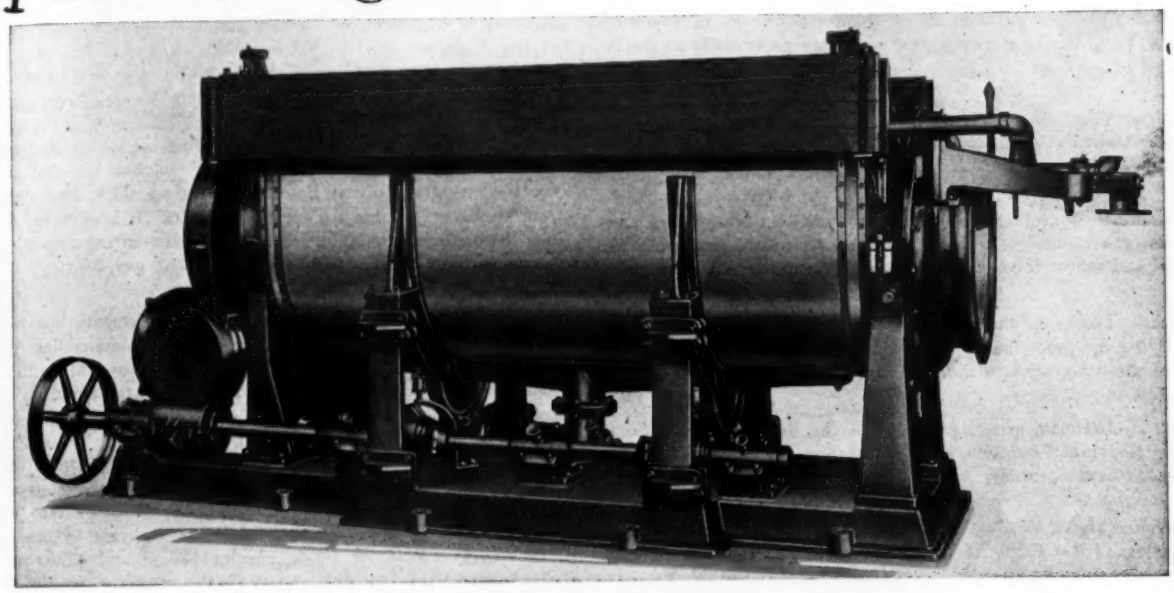
[FROM OUR REGULAR CORRESPONDENT]

WASHINGTON, D. C., August 22, 1928.—The usual summer dullness is observable in the Finnish paper market, says a report to the Department of Commerce from Helsingfors.

Small quantities of news print have been left over from this year's output, but optimism is felt following sales at favorable prices. Orders from both South American countries and China have been received for news print in sheets and for thin printings. Conditions affecting the market for wrapping paper have undergone little change, although fewer orders have been received.

Shipments by the three larger paper organizations in Finland, the Paper Mill Association, Kummene Aktiebolag, and the Finnish Paper Bureau dropped to 17,198 tons during June as against 23,445 tons in May. Shipments for the first half of this year, however, surpassed those for the corresponding period last year by 6,796 tons, or approximately 6¾ per cent. Both the chemical and mechanical pulp market are dull, with prices holding steady. The United States has been the heaviest purchaser of chemical pulp, followed by the United Kingdom, Russia, France and Belgium.

Twenty odd thousand tons of paper pass through Bird Screens daily



The BIRD SCREEN

Paper makers tell us that they have saved a lot of money by putting in Bird Screens.

Are you using Bird Screens?

BIRD MACHINERY

BIRD MACHINE COMPANY

South Walpole : : Massachusetts

2233

New York Trade Jottings

Frank D. Comerford, president of the New England Power Association, has been elected a director of the International Paper Company.

* * *

Jack Galewitz, manager of the Great Atlantic Paper Company, New York, has been visiting the Canadian paper mills in the interest of his organization.

* * *

New York Stock Exchange has received notification from Johns-Manville Company of proposed increase in capitalization to 1,000,000 shares from 750,000 shares.

* * *

National Traveling Salesmen's Foundation, New York, announces a campaign to raise subscriptions to erect a home for aged and infirm traveling salesmen at Winston-Salem, N. C.

* * *

Carlo Moriondi, the eminent Italian engineer, who has been studying the paper industry in the United States, sails from New York for Italy next Saturday, August 25.

* * *

R. H. Laftman, general manager of the Bogalusa Paper Company, Bogalusa, Louisiana, is scheduled to sail from New York for Sweden next Saturday, August 25.

* * *

Walter Hicks, of Daniel M. Hicks, Inc., dealers in paper mill supplies, of 200 Fifth Avenue, New York, has returned to duty after spending an enjoyable vacation at Shelter Island, N. Y.

* * *

The Perkins-Goodwin Company, of 551 Fifth Avenue, New York, have been appointed sole agents in the United States for Skonviks Aktiebolag, manufacturers of strong, unbleached sulphite.

* * *

Westinghouse Electric and Manufacturing Company declared regular quarterly dividends of $1 each on the common and preferred, the common payable October 31 and the preferred October 15, both to stock of record September 28.

* * *

W. G. MacNaughton, of the News Print Service Bureau, has returned to headquarters after a long and comprehensive inspection tour during which he visited the news print mills on the Pacific Coast and in Canada.

* * *

Charles F. Guignanon, for past ten years New York manager, Gillican-Chipley Co., naval stores, New Orleans, will in the future operate under his own name as sales agent for that company in the same territory.

* * *

A majority of 7 per cent preferred and common stock of International Paper Company has been deposited in favor of the plan for formation of International Paper and Power Company as a holding company. Time has been extended until September 30 for deposit of shares.

* * *

Report of United Paperboard Company, Inc., for year ended May 26, 1928, shows net income of $304,963 after depreciation, taxes, etc., equivalent after dividends on 6 per cent preferred stock to $1.88 a share earned on 120,000 shares of common stock. This compares with $88,185 or seven cents a share in previous year.

* * *

The National Association of Waste Material Dealers, Inc., Times Building, New York, announces that the Interstate Commerce Commission on its own motion has instituted an investigation as to the rates on import and domestic news print paper to points in official and southern classification territories. The rates involve shipments from producing territories in the United States and also on imported news print paper from the seaports to destinations in the classification territories mentioned above.

* * *

The Houston Gulf Gas Company, Houston, Tex., has consummated a contract for the sale of natural gas to the Union Sulphur Company for its sulphur plant now being erected at Boling Dome, Wharton County, Texas. The plant will be served through seven miles of ten-inch line to be laid from the Houston Gulf's sixteen-inch main line from White Point and Refugio fields. Officials of the Union Sulphur Company, which for years has been one of the largest producers of sulphur say that they have forty years supply at Boling, where tests show the sulphur strata to average around 100 feet in thickness. It is expected that when the plant now building reaches its maximum capacity it will consume around twenty million cubic feet of gas daily.

* * *

In a brief which the Texas Gulf Sulphur Company has filed with the Interstate Commerce Commission recommending that certificates of convenience and necessity be granted to both the Atchinson, Topeka and Santa Fee and the Missouri Pacific for the construction of railroads into the Boling Dome sulphur region, information is given as to the extent of the sulphur deposit and the scale in which it is to be mined. The Boling Dome area embraces 12,000 acres, the brief says. The company's plant will begin with a production of approximately 400,000 tons a year, and this output will be increased to 1,000,000 tons a year by the end of ten years. "At Long Point, east of Boling and adjacent to the proposed Santa Fe line, the Gulf Production Company has title to 6,000 acres of sulphur-bearing land, with 46 wells already drilled," it is stated. "Less than one-half the dome has been tested, but engineers say than from tests already made a minimum production of 7,000,000 tons is expected and the entire tract is reckoned as yielding between 15,000,000 and 20,000,000 tons. Sulphur-bearing lands are also found at Big Creek and Nash Dome." The construction of the new line by the Missouri Pacific would make available as deep-water outlets for sulphur shipments the ports of Texas City and Freeport, as well as Galveston.

Frank D. Comerford Elected a Director

Frank D. Comerford, president of New England Power Association, has been elected a director of International Paper Company. International Paper Company owns 45 per cent of the common stock of New England Power Association, and it is expected that International Paper and Power Company—the new company which is to be formed to take over the properties of International Paper Company—will hold a very large majority of the common stock of the Association.

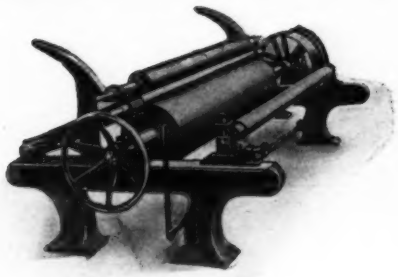
New England Power Association is the holding company for the properties comprising the New England Power System, a well balanced combination of wholesale power companies and retail distributing companies interconnected and operated under one management. This group constitutes the largest electric utility organization in the New England States and its hydro power developments are the largest east of Niagara.

Casper Garrett Dead

[FROM OUR REGULAR CORRESPONDENT]

ELKTON, Md., August 20, 1928—Casper Garrett, for a number of years manager at the mills of the Marley Paper Manufacturing Company, Marley Falls, Childs, Md., died at Elkton, Md., August 13, after several weeks illness of a complicated ailment. He was 67 years of age, and a native of Philadelphia, Pa. Mr. Garrett is survived by his wife and daughter.

Cyclone (Fast) Beater



Tissue Winder

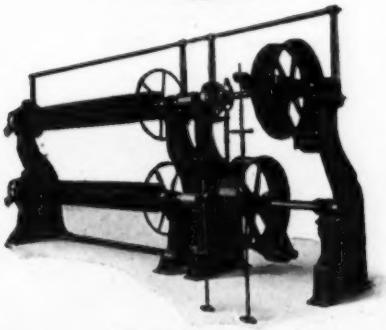
Compare Values

BEFORE you buy any new paper mill machinery, compare values as they are today. Compare designs and construction, for on these factors depend Efficiency, Durability and Freedom from Breakdowns. ¶ Don't forget, we make a complete line of equipment, including Fourdrinier or Cylinder Machines. ¶ Whatever you need, write us,—let us bid on your requirements. ¶ Bulletins on any products sent on request.

DOWNINGTOWN
Manufacturing Co.
Downingtown, Pa., U. S. A.

Cylinder Mould

Dryers



Two Drum Upright Reel

TAPPI Members to Visit Wisconsin Mills

Following three unusually eventful days at the Fall Meeting of TAPPI in Wausau, a number of members have indicated their desire to spend Friday, September 28, at the mills in the vicinity of Wisconsin Rapids. This city is about fifty miles south and west of Wausau so that visitors will leave Thursday evening by train or automobile and spend the night in Wisconsin Rapids.

Forest Products Laboratory

Since many members of TAPPI have never visited the Forest Products Laboratory, this institution is planning to hold open house for inspection and demonstrations on Friday, September 28, and Saturday, September 29. Those who wish to may leave Wausau on Thursday evening and spend Friday at Madison; or, if they plan to visit Wisconsin Rapids on Friday, may spend Saturday at the Laboratory.

Madison lies about 150 miles south of Wausau so that automobilists will find it a beautiful drive over hard surfaced roads. Between Wausau and Madison lie the Wisconsin River Dells, rugged gorges, cut through sand rock and having many immense, fantastic formations. The Dells are famous throughout the middle west and are annually visited by more than 250,000 persons. In the same general location is Devils Lake, a body of crystal water, set deep in a gigantic pile of glacial red granite.

Counted as one of the most beautiful small cities in the country, Madison houses the State Capitol which is also considered by travelers as one of the finest in the United States. The city is situated on three lakes and is the site of the University of Wisconsin, whose rolling campus overlooks one of these lakes. Adjacent to the University are the buildings of the Forest Products Laboratory and in other portions of the city are the plants of the Burgess Laboratories and the French Battery Company, well known makers of batteries.

FOREST PRODUCTS LABORATORY, MADISON, WIS.

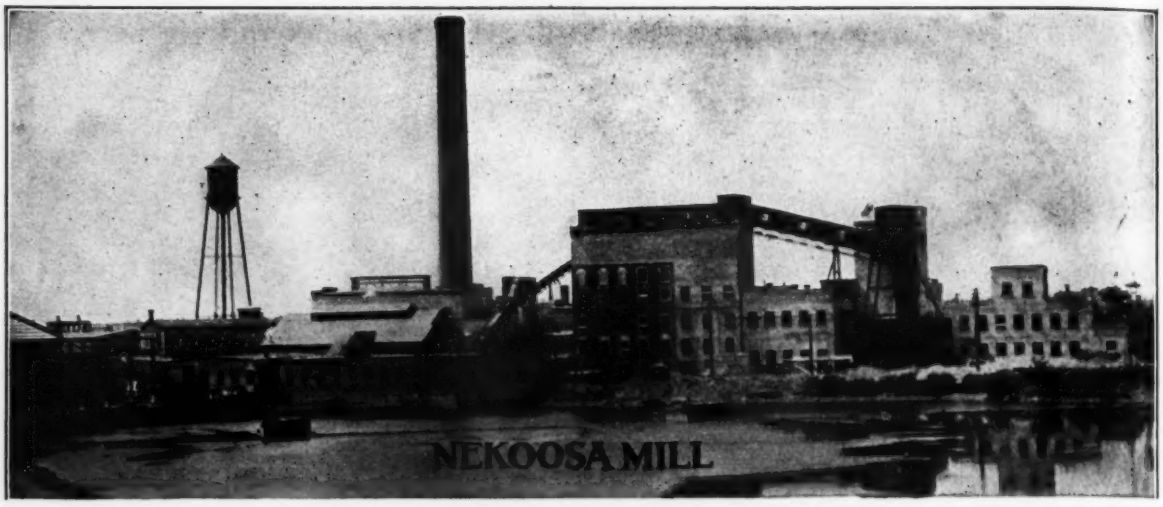
The Forest Products Laboratory is devoted to the study of the physical and mechanical properties of wood, its chemistry and pathology, and its manufacture, conversion, and use. There are sections devoted to the study of timber mechanics, wood preservation, kiln drying, crate testing, wood chemistry and microscopy, pulp and paper.

Pulp and Paper Demonstration

Visitors may see all these departments but the main demonstrations will be held in the pulp and paper section. This is one of the largest and most active of the divisions of the Forest Prod-

WAUSAU PAPER MILLS, WAUSAU, WIS.

When you come to anti-friction bearings, know this,—the final cost of Ball Bearings is a saving — — —
The New Departure Mfg. Co.
Division of General Motors
Bristol, Conn.
DETROIT CHICAGO SAN FRANCISCO
New Departure
Quality
Ball Bearings
967



NEKOOSA MILL OF THE NEKOOSA-EDWARDS PAPER CO.

ucts Laboratory, owing largely to the intelligent interest and co-operation of the paper industry. Investigations of the fundamentals of the groundwood process have been completed and similar studies of the chemical processes and of bleaching are being prosecuted. In the sulphite process, in particular, the optimum cooking conditions for producing desirable yield and strength of pulps for various uses have been worked out and demonstrated in commercial operations. Lowered production costs were found to accompany the improvements brought about in yield and strength. Because of the depletion of spruce and of the relatively few additional woods used at present to furnish most of our paper supplies, the effort now is to develop processes for making news print and book paper from so-called inferior species and from other vegetable fibers. Studies relative to the use of the sulphite process with the hardwoods are in progress and indicate that this method is applicable to many of the species not heretofore considered suitable.

Semi-Chemical Pulp

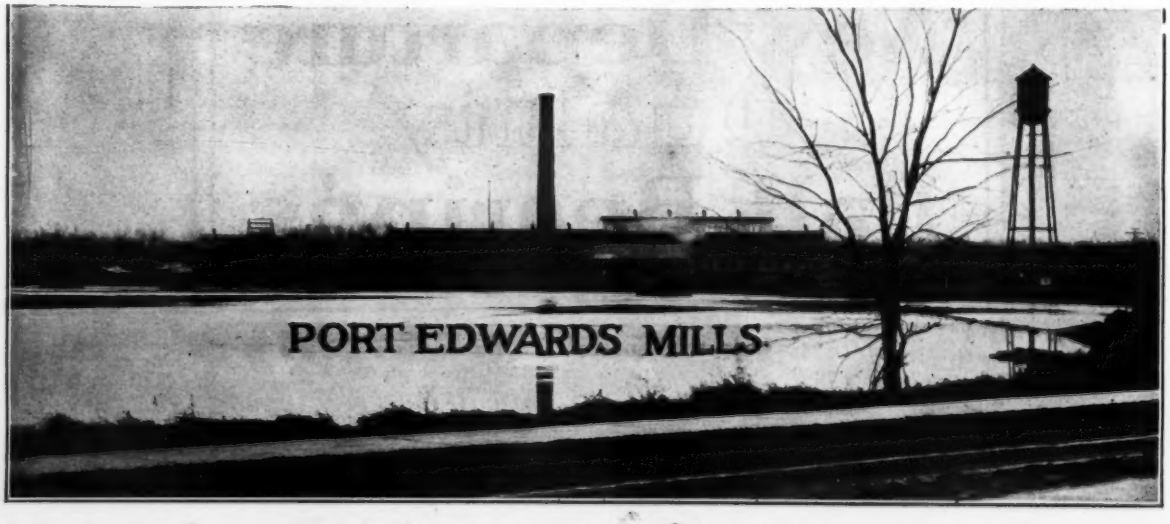
Another process offers even greater relief to the spruce stands in that it aims to utilize hardwoods for the production of news print and other cheap print papers. By this process—which is known as the semi-chemical process—nine-tenths of a cord of black gum has been made to yield a ton of pulp, whereas 1.2 cords of spruce are required to produce the same amount of spruce ground wood. Similar satisfactory results have been obtained with tupelo gum and the high quality of the pulp gives promise that such broadleaf woods as birch, beech, maple, aspen, and cottonwood may also be used to produce print papers. The development of this project is important both as it affects the spruce situation and as it affects the hardwood forests of the South. Three commercial plants are already producing pulp by the new semi-chemical process.

Semi-mechanical processes involving the use of both alkaline and acid (sulphate and sulphite) cooking liquors have been developed and applied to numerous species. These liquors are used to soften the chips and a mechanical pulping is subsequently accomplished in a rod mill or similar disintegrating device. Such processes result in greatly increased pulp yields and make for real pulpwood conservation.

Nekoosa-Edwards

A few miles south of Wisconsin Rapids are the mills of the Nekoosa-Edwards Paper Company. This company operates three hydro-electric stations generating 20,000 hp.

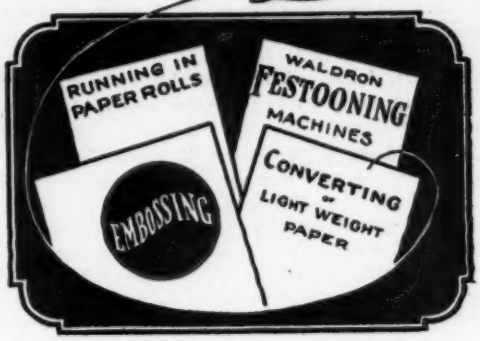
At Port Edwards are located a 90-ton sulphite mill, a ground



PORT EDWARDS MILL OF THE NEKOOSA-EDWARDS PAPER CO.

CONVERTED
LIGHT WEIGHT
PAPERS
Dawn of the Great Future Market For The Paper Industry
Wall Paper, through compelling color effects and richly embossed surfaces, now wrests a gigantic market from the most energetic campaigns for painted walls. The future for box papers, utility wraps, linings and individual servers never looked brighter. BEAUTY—in everything made of paper—is the element that is building a new era for the paper industry—just as it has already done the automobile trades. Are you preparing to

Theres Needed Information For You In These



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"Converting of Light Weight Papers." Twenty page book on "Embossing". Illustrated bulletin on "Mechanical Festooning". "Instruction Sheet on How A Paper Roll Should Be Run In".

All timely authoritative treatises on modern methods in Paper Converting, prepared by engineering specialists for the purpose of assisting the trade to secure additional business and insure profitable production.

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MAIN OFFICE AND WORKS, NEW BRUNSWICK, N. J.

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New York City
New Birks Building
Montreal, P. Q.

wood mill, and three Fourdrinier machines and one Yankee. At Nekoosa, a 60-ton kraft pulp mill, a 40-ton sulphite mill and three Fourdrinier machines and one Yankee machine. The paper production of 230 to 240 tons per day consists of dry and water finish butchers papers, kraft papers, M.F. and M.G., envelope, bond, bag, book and specialties.

For the manufacture of paper at the Port Edwards plant, a supply of spring water is obtained from Nepco Lake, an artificial lake made by damning a trout stream. The dam is 26 feet high and the lake is three miles long, three-quarters of a mile wide, with an average depth of fifteen feet and a volume of 2,300,000,000 gallons. It contains over 600 acres, and has fourteen miles of shore line. The average flow of the stream is 100,000 gallons per minute, while the mill supply is only 8,000 gallons per minute. Water for the mill is treated with alum and passed through a large settling basin, then pumped through a 30 inch main under the Wisconsin River to the mill. The main flow of water passes through the power house, where a 400 hp. hydro-electric unit generates not only the power to pump the water, but an excess which is used in the mill.

Consolidated Water Power & Paper Co.

The Consolidated Water Power and Paper Company have two mills in this vicinity. The Wisconsin Rapids mill is capable of producing eighty tons of sulphite daily, and about 250 tons of ground wood. There are three Fourdriniers and one cylinder machine manufacturing news print and wrappings. Of unusual interest is the carefully designed boiler plant embracing many modern improvements such as Nordstrom refuse dryer, complete insulation, air preheater and economizer, 400 lb. pressure steam, extracting through turbines at 125 lb. and 25 lb.

The Biron mill of this company has three Fourdriniers making news print and wallpaper.

Make Reservations Early

Those who have not made their hotel reservations for the meeting at Wausau should do so at once by writing the Hotel Wausau, as many of the rooms have already been spoken for. A special mailing will soon be made to all TAPPI members regarding railroad rates. The Chicago, Milwaukee, St. Paul and Pacific R. R. has agreed to run a special train for those coming through Chicago. This train will leave the Union Station, Chicago, on Monday, September 24, at 9:15 p.m. and will arrive at Wausau Tuesday morning at 8:10 o'clock. Reservations may be made at once by writing the C., M., St. P. & P. ticket office, Union Station, Chicago, asking for space on the TAPPI special for that date.

The entertainment program will appear in the PAPER TRADE JOURNAL for August 30 and the full technical program will appear September 6. Any further information may be obtained from the general chairman, Allen Abrams, Rothschild, Wis.

Dayton Paper Stock Co. Sold

[FROM OUR REGULAR CORRESPONDENT]

DAYTON, Ohio, August 20, 1928.—Announcement has been made of the sale of the majority interest in the Dayton Paper Stock Company, First and Conover streets, to M. B. Speer of the M. B. Speer & Co., of Pittsburgh, Pa., and the Gardner-Harvey Paper Company of Middletown, Ohio.

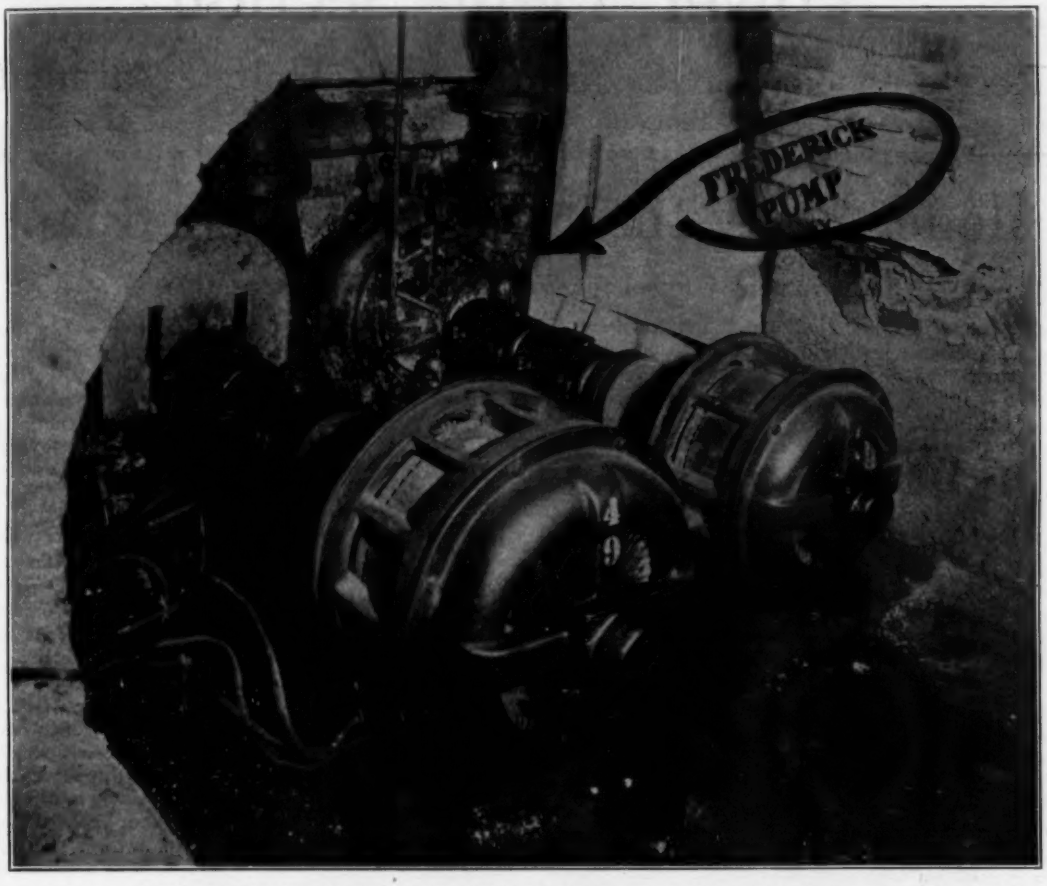
It is believed the purchaser contemplates expansion of the facilities at an early date, though no announcement has been made of immediate plans. The new owners are largely interested in the industry and the acquirement of the Dayton plant is believed to be a step in the path of improvement. The reputation of those interested in the Dayton establishment is of the best and the deal is reported to forecast a general enlargement of operations in this vicinity and the Miami Valley.

The officers of the new corporation are: M. B. Speer, president; S. L. Graff, of D. Graff & Sons, of Kalamazoo, Mich., vice president; M. S. Johnston, of the Gardner-Harvey Company, paper manufacturers, Middletown, secretary and treasurer; Nicholas Metz., of Dayton, assistant secretary; and Leon A. Slavin, general manager.

Mr. Slavin previously had been manager of the Dayton concern and is widely known in the paper trade of the valley.

NEPCO LAKE BUILT BY THE NEKOOSA-EDWARDS PAPER CO.

"FREDERICK STOCK PUMPS ARE THE LAST WORD"



A 6" Type SSV-L Frederick Centrifugal Pump installed in a well-known Penna. Paper Mill. This pump is driven by a 40-H. P. motor, and has a capacity of 500 G. P. M. against a head of 90'

Pump More Stock with Less Power

Due to the fact that we of Frederick have, for years, made a "specialty" of designing and building Paper & Pulp Mill Pumps, we are absolutely sincere in saying that you can "PUMP MORE STOCK WITH LESS POWER" with Frederick Pumps. Now, inasmuch as "stock pumping" at best accounts for a considerable portion of the total power used in the mill,—it's an easy matter to figure just how profitable it would be for YOU to be able to pump "more stock" with "less power".

For handling consistencies up to 4% the FREDERICK STANDARD STOCK PUMP has been found extremely economical; while for consistencies up to 6%, many mills have found the FREDERICK SUPER-STOCK PUMP to be the "last word." THE LIST OF USERS OF FREDERICK PUMPS READS LIKE THE BLUE BOOK OF INDUSTRY—(There "must" be a reason). Of course, Frederick also makes Centrifugal Pumps for other services, such as: Boiler Feed; Fire Protection; Water Supply; etc.

Ask for our Special Paper Mill Bulletin—
no obligation.

FREDERICK
PUMPS

THE FREDERICK IRON & STEEL CO., FREDERICK, MD.

Power Plant Section

Reducing Power Costs Through Unit Treatment

Conducted by REGINALD TRAUTSCHOLD, Consulting Engineer

Modernizing the Mill and Power Plant

Instrument Control for Soda and Sulphate Pulp Mills

The well appointed soda pulp mill with a full complement of indicating and recording instruments presents one of the most complete and self-contained examples of modern instrument control in an all embracing, production industry to be found among commercial activities. The flow of materials and the orderly arrangement of the various process stages in the production of the pulp permits the attainment, in part, of a highly efficient closed process cycle, entailing relatively little make-up of the active reagents and the rejection of no great amount of refuse.

The active agent in the cooking liquor, caustic soda, is customarily produced by boiling soda ash and lime and the soda ash constituent is quite largely reclaimed from the leach tanks to which the black liquor, reclaimed from the washing tank, or diffuser, after the completion of the actual pulp production, passes from the black ash rotary furnace. Fresh soda ash, in fact, is required only to make up the losses occurring during the chemical processes entailed in pulp production. To maintain an effective and economical cycle from caustic tank to bleach tank and back again, however, necessitates the use of numerous carefully calibrated instruments for the observation of conditions at almost every stage in the development of the pulp forming process and, as well, in the various steps entailed in the treatment of the pulp from its reclamation from the diffuser to its delivery from the pulp dryer in condition for use in paper mill service.

The heat balance of an economical steam plant, the closed cycle of a refrigerating system or even the efficient flow of work systems which have been so effectively developed in the modern automobile factory present no prettier coordination of production processes, control of output, elimination of waste and limitation of production costs than does the modernized soda pulp mill under present day instrument control. A cursory review of the steps entailed in soda pulp production and their effective coordination into one continuous and repetitive process, not as an exposition of soda pulp manufacture, but rather to point out the strategic utilization of instrument control, consequently, will serve to picture what may well be termed the modernization of the soda pulp mill.

Outline of Process

The green liquor from the leach tanks, together with the lime and soda ash make-up, are subjected to a boil in the caustic tank to produce the cooking liquor, the initial step in the process. After this, the caustic liquor is passed through a filter or settling tank for the removal of the sludge and the clear liquor is run off into storage tanks, preparatory to its use in the digesters.

The digester is then charged with wood chips and caustic liquor and the mixture subjected to a "cook" at a relatively high temperature, somewhat in excess of 300 degrees Fahrenheit representing usual practice. The cooking is performed either by introducing live steam into the digester or by circulating the cooking liquor through an outside heater, commonly termed the indirect heater. Relief steam, both during the cook and at its end, is ordinarily condensed in a water heater, in order to conserve all possible heat.

After the resulting pulp has been sufficiently cooked, it is blown into a receiving tank, or blow pit, and then flushed into the washing tank, or diffuser. Here the pulp is separated from the so-called "black liquor" and after being screened and thickened is ready for the important bleaching process.

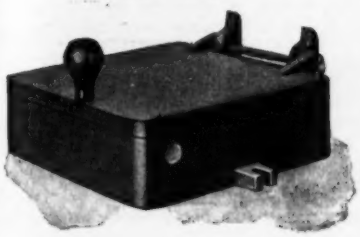
COMPLEMENT OF CONTROL INSTRUMENTS FOR SODA AND SULPHATE PULP MILLS

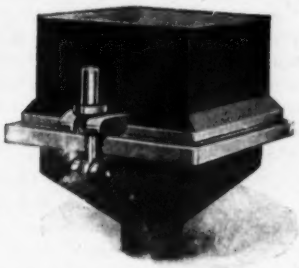
Service and Instrument	Recommended Working Range[1]
Caustic Tank and Storage	
Temperature in caustic tank Recording thermometer	50 to 220 deg. F.
Supply of caustic liquor (storage tank) Recording liquid level gauge	0 to 10, 15 or 20 ft.
Quantity measuring instruments for lime, green liquor, soda ash and water supplies.	
Indirect Heater, Digester and Condenser	
Temperature of cooking liquor (indirect heater) Indicating thermometer	300 to 335 deg. F.
Steam pressure (indirect heater) Recording steam pressure gauge	100 to 150 lbs.
Digester pressure Recording steam pressure gauge	70 to 125 lbs.
Digester (Stationary) temperature Recording thermometer	300 to 335 deg. F.
Digester (Rotary) temperature Recording thermometer	300 to 335 deg. F.
Digester combined temperature-pressure Combination recording thermometer	300 to 335 deg. F. 70 to 125 lbs.
Condenser temperature instruments 2-pen recording thermometer	50 to 220 deg. F.
Flow meters for steam and water	
Washing Tank or Diffuser	
Pressure of wash water Pressure gauge	40 to 50 lbs.
Flow meter for supply of wash water	
Liquor Control Requirements	
Black liquor storage Recording liquid level gauge	0 to 20 ft.

[1] Advocated by *The Foxboro Co., Inc.*

Service and Instrument	Recommended Working Range[1]
Evaporators Steam pressure gauge Combination vacuum-pressure gauge	
Rotary furnace (Soda Process) instruments CO_2 gas recorder	11 to 14% CO_2
Flue gas temperature Recording thermometer	0 to 800 deg. F.
Draft Indicating gauge	½ in.—0—1 in.
Smelting furnace (Sulphate Process) instruments Pressure indicating gauge	0 to 10 in. water
Bleaching Processes	
Bleach liquor (bleaching powder) Recording thermometer	30 to 100 deg. F.
Bleach liquor (liquid chlorine) hot water bath Recording thermometer	50 to 150 deg. F.
Supply of water Recording flow meter	
Bleach liquor storage Recording liquid level gauge	0 to 10, 15 or 20 ft.
Bleaching tanks temperature Recording thermometer	70 to 115 deg. F.
Pulp Preparation	
Stuff chest charge Recording liquid level gauge	0 to 10, 15 or 20 ft.
Pulp dryer temperature Recording thermometer	190 to 275 deg. F.
Shipping scales, etc.	

Valley Hot Plate for Drying Test Sheets

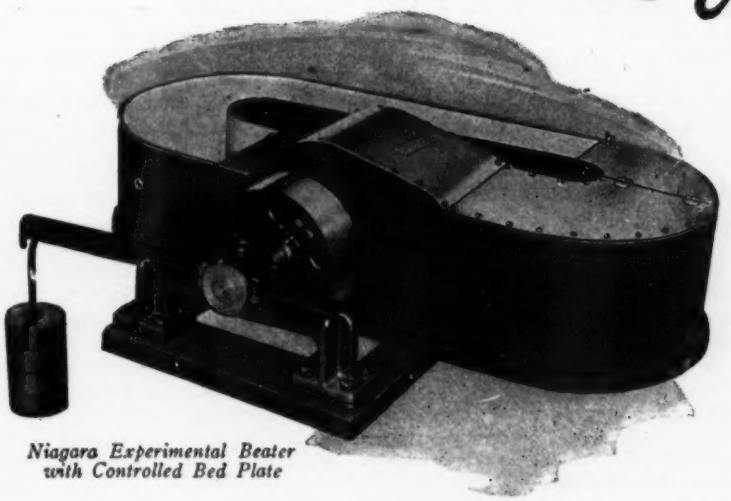




Valley Sheet Mould for Forming Test Sheets

Valley Hydraulic Press for Removing Water from Sheets

THIS LABORATORY EQUIPMENT is SAVING DOLLARS for 97 PAPER MILLS



Niagara Experimental Beater with Controlled Bed Plate

By substituting accurate measurements of facts for guesswork with its wasted effort, time and materials, Valley Laboratory Equipment is today a profitable investment for any mill. It is the definite means of control of raw materials that go into their product for 97 mills. They know absolutely whether raw materials are right and up to specifications.

Valley Laboratory Equipment is an additional aid to better paper-making — as necessary as workmen's tools. Developed in our cooperative mill laboratories, every piece of Valley Laboratory Equipment is original equipment — today the recognized paper mill laboratory equipment throughout the country.

Perhaps the experience of other mills using Valley Laboratory Equipment is of interest to you. Your request for information will bring you complete details. Write today.

VALLEY IRON WORKS CO.

Machinery for Paper and Pulp Mills

APPLETON WISCONSIN

New York Office: 350 Madison Avenue

Western Manufacturing & Sales Division: Smith & Valley Iron Works Co., Portland, Oregon

The black liquor is stored temporarily and is then brought to a considerably higher degree of density, or concentration, in some form of evaporator. The thick black liquor constitutes another stored supply, which after being superheated is sprayed into the rotary furnace and converted into "black ash." This substance is in melted form and contains chiefly soda ash and carbon. It is discharged into tanks filled with water, where the soda ash leaches out and forms the green liquor from which the caustic cooking liquor is prepared.

The pulp from the screens and thickeners passes to the bleaching tanks where it is mixed with the "bleach liquor," prepared by dissolving bleaching powder in water at about ordinary mill temperature and the clear liquor is drawn off from the bleach dissolving tank into a second, or bleach liquor storage, tank before it is used in the bleaching tanks. After further washing, the pulp goes to the stuff chest and then to the pulp dryers for the final treatment before delivery to the paper mill.

Such is a very sketchy picture of the processes entailed in soda pulp production, familiar to all pulp men, of course, but essential nevertheless for a proper appreciation of the real value of the complement of control instruments which will be presented and which is necessary if the mill is to produce pulp at minimum cost. These instruments as they are mentioned, furthermore, will follow the cycle of production steps as they have been enumerated and an attempt will be made to give some idea of the advisable working ranges of the various instruments, as well as to indicate the type and function of the recommended devices. Specific instrument specifications will not be attempted, however, for individual mill demands and requirements can readily exert modifying influences which, though they cannot be ignored in the field, are local rather than general in character. This reservation applies to the outline of production processes presented, which should be viewed as of an illustrative nature rather than as recommendations.

Instrument Control from Caustic Tank to Diffuser

Starting with the caustic tank, it may be assumed that the ingredients composing the charge of the tank, lime, green liquor, water and the make-up soda ash constituent, are all measured properly, for it is essential, naturally, that the resulting cooking liquor be of uniform composition, or as near uniform as the demands of commercial practice will allow. The duration of the cook and the temperature to which the liquor is elevated are then the dominating considerations for control, making the installation of an indicating and recording thermometer on the caustic tank the first of the essential control instruments. As the temperature of the liquor is elevated gradually, the advisable working range of such instrument is from 50 to about 220 degrees Fahrenheit.

Passing the liquor through the filter press and settling tank, the second of the essential control instruments is required to measure the delivery to and from the caustic liquor storage tank. In this case, the approved instrument is of the general type familiar to all through the patronage of public gasoline filling stations, a recording liquid level gauge. The range of the appropriate instruments vary greatly, but is customarily from 0 to 10, 20 or 30 feet. By the simple expedient of recording the depth of the liquor in the caustic storage tank, both the supply of clear caustic from the settling tanks and the amount of liquor fed to the digesters or indirect heater are suitably accounted for.

The all important digester, where the cooking of the pulp takes place, is charged with the properly measured quantity of wood chips, the prescribed amount of cooking liquor from the caustic storage tank and the required amount of steam for consummating the cook. The actual cooking of the pulp is accomplished either by introducing steam directly into the digester or indirectly by circulating the cooking liquor through an independent connecting indirect heater.

If the indirect heater method is employed, the temperature attained by the cooking liquor and the steam pressure in the heater constitute the critical control requirements. The liquor should be brought to a temperature of around 325 degrees and quite commonly the thermometer employed is of the simple indicating class. For effective managerial direction, however, an instrument which both indicates and records would appear far more desirable. The indirect heater should also be provided with an indicating steam pressure gauge having a working range of from 100 to 150 pounds.

Where the pulp cooking is accomplished by introducing steam directly into the digester, a somewhat different method of instrument control is resorted to, whether the digester is of the stationary or rotary type. A recording thermometer having a working range of 300 to 325 degrees Fahrenheit is required in either case and a pressure recording gauge with a working range of 70 to 125 pounds, or else a combined temperature-pressure instrument, also of the recording type, should be employed. The heating steam should also be calibrated in units of pressure and flow, thus securing a complete picture of the conditions existing in the digester and of the progress in pulp cooking.

The temperature of condensed relief steam and of the cooling water, as well as the quantity of the condensing medium in the condenser, constitute other conditions which should be known to insure effective and economical conduct of the digesting process. A two-pen, or duplex, recording thermometer is the logical instrument for indicating and recording the critical temperature conditions and some form of approved liquid flow meter will serve to record the consumption of cooling water. Not only do such instruments supply the information essential for the economical conduct of the pulp digesting process, but indirectly exert considerable influence upon both the quality and quantity of the output of the digesters.

On the termination of the cook, the pulp is blown into the receiving tank, or blow pit, which is sometimes provided with a depth gauge to note and record the output of the digesters. However, while such a measure may provide information of some value, the instrument is not always considered essential, for the wet pulp passes from the blow pit to the diffusers where it is thoroughly washed and the pulp separated from the black liquor, the quantities of both of which are accounted for subsequently in the amount of green liquor returned to the caustic tank and the amount of dry pulp produced.

The diffuser, or washing tank, should be provided with an indicating pressure gauge for furnishing information regarding the pressure of the wash water. This varies with different mills, but is usually in the neighborhood of 40 or 50 pounds. A flow meter for recording the consumption of water is also a valuable aid in the control of a frequently overlooked expense item in the cost of pulp production.

Instruments for Liquor Control

The black liquor which is washed out of the pulp in the diffuser is customarily collected in a storage tank and there measured by means of a recording liquid level gauge of suitable capacity, usually from 0 to 20 feet, or so. From this temporary storage it is drawn off to the concentrating evaporators, which should be provided with proper steam gauges, flow meters for recording the consumption of steam and combination vacuum-pressure gauges, if suitable control is to be exercised over the important task of concentrating the black liquor.

The heavy black liquor is usually stored preparatory to being superheated and then sprayed into the rotary furnace to produce the black ash from which the soda ash constituent is reclaimed by leaching, to form the green liquor supply for the caustic tank. These particular steps necessitate the sensitive regulation of furnace operation.

The critical information required for guidance in economical and efficient formation of the black ash is, in brief, the percentage of carbon dioxide present in the flue gases of the furnace without the presence of carbon monoxide, the flue gas temperature and the draft at the back end of the furnace. This calls for the use

PERKINS-GOODWIN CO.
AND
SCANDINAVIAN PULP AGENCY, INC.
AMALGAMATE

ON DECEMBER 31ST OF THIS YEAR, PERKINS-GOODWIN CO. WILL TAKE OVER THE ENTIRE EXECUTIVE AND SALES ORGANIZATION OF THE SCANDINAVIAN PULP AGENCY, INC.

THIS, TOGETHER WITH OTHER AGENCIES WHICH PERKINS-GOODWIN CO. HAVE RECENTLY SECURED WILL GIVE THEM THE EXCLUSIVE SALE IN THE UNITED STATES OF THE OUTPUT OF MILLS PRODUCING APPROXIMATELY 300,000 TONS PER ANNUM OF SWEDISH SULPHITE AND SULPHATE PULPS AND OF A VARIETY OF QUALITIES WHICH WILL ENABLE THEM TO SUPPLY PULP SUITABLE FOR PRACTICALLY ALL REQUIREMENTS.

UNTIL DECEMBER THIRTY-FIRST THE TWO COMPANIES WILL CONTINUE TO OPERATE AS AT THE PRESENT TIME AND AFTER THAT DATE ALL NEW BUSINESS WILL BE TRANSACTED IN THE NAME OF PERKINS-GOODWIN CO., BUT ALL EXISTING ORDERS OR CONTRACTS ON THE BOOKS OF THE SCANDINAVIAN PULP AGENCY WILL BE COMPLETED BY THAT COMPANY.

Perkins-Goodwin Co.
ESTABLISHED 1846
551 Fifth Avenue
New York, N.Y.

of an efficient type of CO_2 gas recorder, a recording thermometer for noting the flue gas temperature, which rises to several hundred degrees Fahrenheit, and a sensitive indicating draft gauge.

While the black ash output of the furnace is not customarily recorded, as in melted form, it is discharged into steel tanks filled with water where the soda ash content is leached out to form the green liquor. The quality and quantity of the latter should be determined and recorded between the passage of the liquor from the leach tanks to the caustic tank. This is essential to determine the quantity of soda ash make-up required in the preparation of the cooking liquor.

Instrument Control in Pulp Treatment

In the refining of the wet pulp discharged from the digester, after it has passed through the screens and thickeners, instrument control at each stage of the process is of the utmost importance, particularly in the bleaching processes. A powerful chemical reagent is employed, chlorine, and it is imperative that the composition and strength of the bleach, the duration of the bleach and the temperature developed during the actual bleaching be regulated and controlled with all feasible accuracy. The bleach liquor if too strong, or if the bleaching process is continued too long will cause the chlorine not only to destroy the coloring matter in the pulp, but the cellulose itself, creating a derived product, oxycellulose, which is distinctly detrimental to the production of quality paper.

The bleach, whether made from bleaching powder dissolved in water or by diluting liquid chlorine, should be under sensitive control and this calls for the installation of suitable recording thermometers for noting the temperature in the bleach dissolving tank or that of the hot water bath for the chlorine cylinders. These temperatures are quite moderate and hence the need of their sensitive regulation is accentuated. The clear bleach liquor is then run into a storage tank and allowed to cool, such tank being furnished with a liquid level gauge for the control of the bleach supply to the bleaching tanks. These latter tanks, where the cold pulp stock is subjected to the action of the bleach and the steam which is admitted to raise the temperature of the mixture to the critical value for efficient and economical bleaching, should also be provided with sensitive recording thermometers, for it is the temperature attained and maintained which provides the necessary control in the bleaching of the pulp.

Commenting upon the value of sensitive temperature control during the bleaching process, a prominent manufacturer states:

"The recording thermometer, as used for recording the temperature of the pulp while bleaching, is one of the most essential instruments used in the bleach plant. It not only records the temperature of the pulp, but it shows the filling, bleaching and dumping time. It also acts as a tell tale for any trouble which may occur in the bleacher.

"At the begining of the bleach when the cold stock and liquor are put in the bleacher, the temperature drops and when the steam is turned on, the temperature gradually rises until the maximum temperature is reached and the steam is turned off. This temperature holds until the bleacher is dropped, when the temperature drops to that of the air in the bleacher. When the bleacher is again filled the temperature takes another drop and another bleach is started. If at any time an operator has trouble with a bleacher it shows up on the recording instrument by a broken line.

"It is the temperature that plays the greatest part in the bleaching of the pulp and it is therefore necessary that each bleacher be equipped with a temperature recording thermometer."

On the completion of the bleach, after thorough washing, the pulp is collected in the stuff chest, advisedly provided with a liquid level gauge for measuring the output of the bleacher and the withdrawal of pulp stock to the pulp dryer, and then goes through the dryers for which the essential control instrument is simply a recording thermometer with a working range of between 190 and 275 degrees, or thereabouts. From the dryer, the pulp issues ready for shipment or for use in the paper mill, calling simply for scales and other instruments which do not necessarily form part of the essential instrument control complement for the efficiently operated pulp mill.

Such, in brief, is a listing of the more profitable control instruments for the soda pulp mill. In the sulphate pulp mill the processes entailed in the manufacture of the pulp are quite similar and virtually the same line of instruments represents the complement for the economical control of the various operations. In addition, an indicating gauge should be provided for noting the pressure on the air nozzle of the smelting furnace employed in the sulphate process.

The instruments which have been mentioned are all readily obtainable, being standard devices of demonstrated merit in other industrial, as well as in pulp mill, services, and when kept in effective operating condition supply information of a very pertinent and helpful character. If this is accorded the heed it deserves, the instruments invariably prove one of the most profitable investments which can be made in modernizing the plant.

A New and Unusual Printing Paper

FITCHBURG, Mass., August 20, 1928.—The Fitchburg Paper Company has announced a new printing paper called Fitchburg Finish Book which will be distributed exclusively through dealer channels.

The company has for many years specialized in the production of high grade English finish book and magazine papers, distribution being confined to the larger magazine publishers. A great deal of time has been devoted by the company's manufacturing and research departments to the development of the ideal half-tone printing surface and a large investment has been made in special equipment for the production of such papers at the lowest possible cost.

Fitchburg finish book is the company's most popular product and combines in the one paper all that is to be desired from the printer's point of view. The paper is adapted for printing from process color or fine half-tone plates, as well as from line cuts, Ben Day plates and type. It is made in the popular brilliant blue white color and possesses unusual opacity and bulk.

A large stock of this paper, in standard sizes and in weights ranging from basis 25x38-40—500 to 70—500 is being maintained at the company's mill warehouses in West Fitchburg, Mass.

The company has also prepared a folder, in a size to fit a standard letter file or a salesman's brief case, containing folded samples of this paper in all weights carried in stock. A supply of these folders will be sent to all recognized paper dealers requesting them.

Boston Paper Market Conditions

BOSTON, Mass., August 20, 1928.—Paper merchants in this market find little change in the volume of sales from that of the previous week. Fine papers are rather slow, but generally a normal summer business is being transacted, and the outlook continues good. In some quarters a greater demand for kraft is reported with prices steady. The situation seems favorable for a good fall business. A little improvement is noted in box board by some dealers, while others say their business is slow.

In old papers an increased demand for some grades has advanced prices. It is stated that a shortage has developed. White blank news is now quotable at 1.50 to 1.60 per 100 pounds, compared with a former range of 1.40 to 1.50. A substantial quantity sold at 1.60. No. 1 mixed paper is at .55 to .60, against a previous range of .47½ to .52½, and old newspapers at .60 to .65, compared with .47½ to .52½. Other grades of old papers remain steady at the same levels. Bagging and rags are in a similar situation to that of the previous week, with little or no fluctuation in values.

Twine is moving slowly, with few, if any, large orders. The market is rather unsteady, owing to price-cutting on the part of manufacturers.

Peck Carrier

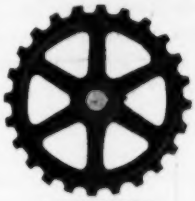
SS-850 Chain for suspending and operating barking drums

"C" Class Combination Chain

"400" Class Chain

"RC" Class Chain for power transmission

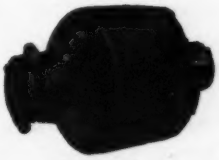
Belt Conveyor



>FLINT-RIM< Sprocket

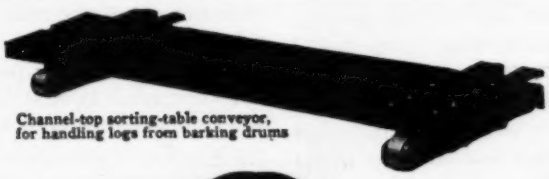
Gears of all kinds

"S" Spur attachment



Friction Clutch

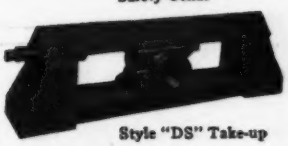
Plain Bearing



Channel-top sorting-table conveyor, for handling logs from barking drums

Malleable Iron Safety Collar

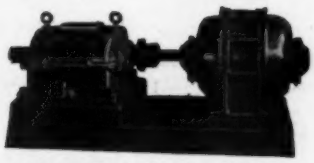
>HEXTOP-< Grease Cup



Style "DS" Take-up

Link-Belt Crawler

Link-Belt Silent Chain Drive



Link-Belt Herringbone Speed Reducer (Sykes tooth form)

Chain Conveyor handling logs

Everything for Handling Materials, and Driving Machinery

EVERY mill should use the new 1088-page Link-Belt General Pricelist Catalog 500, which completely covers in list prices and descriptions, the machinery equipment to keep the mill going. Address the nearest office listed below.

LINK-BELT COMPANY

Leading Manufacturers of Elevating, Conveying, and Power Transmission Chains and Machinery

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Vol. LXXXVII New York, August 23, 1928 No. 8

FOREIGN PAPER TRADE INCREASES

Exports of paper and paper products from the United States during June, show a slight increase over May and increase of about eleven per cent over shipments in June, 1927, according to the Paper Division of the Department of Commerce.

There were substantial increases in the volume of shipments of fine papers as compared with June of last year and considerable decrease in exports of these papers as compared with May of this year. Among the paper specialties, toilet paper showed a slight decrease compared with June, 1927, and was just about the same amount for May as for the present month. Paper towels showed a slight decrease under June, 1927, and a considerable increase over May. Filing folders, index cards, and other office forms, and cash register and adding machine paper increased substantially over shipments of the corresponding month a year ago. The former shows a slight decrease over May, 1928 and the latter a considerable increase over May, 1928. Exports of book paper were about 98 per cent heavier than June of last year and some 400,000 pounds increase over May, 1928. Exports of writing paper were about 10 per cent heavier than June, 1927, and showed a decrease of about 20,500 pounds as compared with May of this year. There was a heavy increase in exports of wall paper as compared with June of last year and a slight decrease under May, 1928.

Exports of newsprint paper were about 22 per cent under June, 1927, and decreased about 30,000 pounds compared with May, 1928. Wall board shipments show a considerable decrease as compared with both June, 1927, and May, 1928. Other paperboard and strawboard decreased in shipments under June, 1927, and slightly increased in exports as compared with May. Exports of boxboard fell off about 5 per cent compared with June, 1927, and showed an increase of about 70,000 pounds over May, 1928. Sheathing and building papers show an increase of 45 per cent over June, 1927, and 246,011 pounds increase over May, 1928.

Exports of wrapping paper, amounting to 2,603,069 pounds, decreased about 14 per cent compared with June, 1927, and decreased 209,192 pounds compared with May, 1928. Shipments of paper bags show a rise of about 27 per cent over June of last year, also an increase of about 50,000 pounds over May, 1928. There was a slight increase in shipments of boxes and cartons as compared with June, 1927, and an increase of 81,514 pounds as compared with May of this year.

Vulcanized fiber showed a gain of 66 per cent over the same month last year also a small gain over May of this year.

Exports of surface coated paper increased 28 per cent over June, 1927, and decreased 400,000 pounds under May, 1928.

Total exports of paper and paper products during June, 1928, were valued at $2,825,946, compared with $2,539,412 during June, 1927, and $2,500,192 during May of this year.

In addition to paper and paper products $417,352 worth of paper base stocks were shipped from the United States during June, 1928. Similar exports during the same month in 1927 were valued at $492,186, and during May at $700,176. The largest item in this group is rags and other stock, exclusive of wood pulp and pulpwood. These shipments amounted during June to 19,750,140 pounds valued at $285,786.

Total exports of paper and paper products for the six months ending June, 1928, were valued at $15,274,048, an increase of $1,405,139 over the same period last year.

Total exports of paper base stocks for the six months period ending June 1928 were valued at $3,204,692 and for the same period in 1927, $2,897,380.

Imports of paper and paper products during June, 1928, registered a decrease of about $1,060,337 compared with June, 1927, and a decrease of about $1,272,602 under May, 1928.

There was an increase of 4,669,251 pounds in incoming shipments of standard news print over the same months a year ago and a decrease of 36,211,888 compared with May of this year. Arrivals of other classes of paper reached an aggregate value of $1,342,467, a decrease of $1,083,941 compared with June, 1927; there was also a slight decrease as compared with May, 1928, Receipts during June of greaseproof paper showed a considerable decrease over the same month last year and a rather substantial increase over May. Kraft wrapping paper shows incoming shipments of 544,715 pounds for this month and 1,343,471 pounds for the corresponding month last year, the May shipments being 619,647. Receipts of miscellaneous printings slightly decreased as compared with June, 1927, but showed a slight increase over May, 1928. Pulpboards in rolls increased in incoming shipments as compared with June, 1927. There was also an increase of about 136,000 pounds compared with May. Cigarette papers showed a considerable decrease under June of last year and a slight increase over May of this year. Wall papers decreased to some extent under June, 1927, and showed a decrease as compared with May of this year. Paper boxes and duplex decalomania paper increased to some extent this month over both June, 1927, and May, 1928. Total arrivals in this group during June were valued at $12,035,580 as against $13,095,917 in June, 1927, and $13,308,182 in May of this year.

Total imports of paper and paper products for the six months ending June, 1928, were valued at $75,944,633 as against $71,603,015 of this period a year ago.

Imports of paper base stock also decreased during June as compared with June a year ago but at the same time registered a considerable increase in value over May receipts.

The six months figures show a reduction in these receipts com-

pared with the same period in 1927. Imports of pulpwood declined by about eleven per cent, receipts up to the end of June aggregating only 738,175 as against 836,686 cords in 1927. Imports of woodpulp, however, increased by about 3 per cent, the total tonnage to the end of this period being 707,463 as against 680,895 tons in 1927. There was also an increase in rag imports, which totaled 210,197,802 pounds, as against 185,662,317 in 1927. Receipts of other classes of waste stock, including waste paper, bagging, old rope, etc. rose from 71,824,070 pounds to 105,964,398 pounds.

Johns-Manville Plans Increase In Capital Stock

The Johns-Manville Corporation has notified the New York Stock Exchange of a proposed increase in capital stock from 750,000 to 1,000,000 no-par common shares. Company officials stated that a special stockholders' meeting had been called for September 5 to vote on the increase.

Purposes of the increase in authorized capitalization are to supply additional shares with which to acquire other business, to extend the present business and to set up a stock distribution fund for employees. Officials declined to state what acquisitions the company proposes to make, on what basis new shares will be offered stockholders so as to raise capital for extension of the present activities, or what amount of stock would be sold to employees.

The outstanding capitalization of Johns-Manville consists of 750,000 no-par common shares, the whole authorized number, and $7,500,000 of 7 per cent cumulative preferred, par $100, of an authorized issue of $10,000,000.

Reports received here recently from the Pacific Coast stated that the company had purchased two tracts of land adjoining its present holdings at Pittsburg, Cal. The purchase of this additional land was made necessary, it was said, by reason of the fact that the company had decided to build a manufacturing plant much larger than originally planned. The project, which includes providing facilities for the handling of large coastwise steamships, was expected to cost nearly $2,000,000. Opinion here is that the company may issue sufficient new stock to provide at least for this construction.

Johns-Manville is engaged in the manufacture of asbestos and magnesia products, electric and automobile specialties, felt insulation and building materials, with plants located in many parts of the United States. In addition, the company owns asbestos mines in Arizona and Quebec and quarries in Pennsylvania.

Time for Deposit of Stock Extended

In order to give stockholders of the International Paper Company further opportunity to deposit their stock under the plan which contemplates the formation of International Paper and Power Company as a new holding company, the time for making deposits has been extended to September 30. While well over a majority of both the 7 per cent preferred and common stocks has been deposited, many stockholders are away on vacation and are unable to deposit their stock. The additional time has therefore been given as the committee is desirous of extending the benefits of the plan to as many stockholders as possible. The list of stockholders of the company has grown to over 26,000.

International Paper and Power Company will act as a holding company for the properties now owned and controlled by International Paper Company and it is expected to hold a very large majority of the common stock of New England Power Association. The formation of the new company will make possible a more complete segregation of the company's power and utility assets—which total approximately 55 per cent—from its pulp and paper assets, and otherwise facilitate the operation and financing of the properties.

United Paperboard Earnings

Sidney Mitchell, president of the United Paperboard Company, in presenting his annual report for the fiscal year ending May 26, 1928, says:

"The earnings were less during the last half of the year, owing to lower prices for the products, although mill costs were somewhat lower.

"Your board of directors have declared a dividend of 6 per cent on the preferred stock, payable quarterly during the ensuing year, in addition to which the earnings on the common stock amounted to 1.88 per cent.

"Your ground wood pulp mill at Lockport, N. Y., has been closed down indefinitely, as ground wood pulp can be purchased for less than cost. The closing of this mill leaves all of your wood pulp mills idle. Your pulp mills were appraised at about 40 per cent of the total property of the company and probably can never be operated again profitably. As the newspapers are so much more politically than pulp mill manufacturers and their employees, there is little likelihood of securing a tariff to sufficiently protect the industry on pulp. There are many other idle pulp mills throughout the country, some of which have been for sale for a long time, and we feel that there is little prospect of being able to sell our pulp mills for any amount commensurate with their value, although there should be some benefit from the sale or use of water power; in fact, since the close of the year the company has completed the sale of a portion of its water rights at Lockport, N. Y., for $210,000.00, after our engineer reported that this property could not be developed hydro-electrically and operated profitably at prices prevailing for electric power at Lockport, N. Y."

CONDENSED BALANCE SHEET, MAY 26, 1928

Assets		
Real estate, plants and machinery		$12,584,618.13
Personal property		14,051.21
Stocks and Bonds		146,251.00
Current Assets:		
Cash	$311,694.38	
Notes receivable (unsecured)	5,943.15	
Accounts receivable	826,254.29	
Merchandise and supplies (at cost or market, whichever is lower)	916,188.30	2,060,080.12
Suspended assets		9,657.43
		$14,814,657.89
Liabilities		
Capital Stock:		
Preferred:		
Authorized	$1,500,000.00	
1828 shares in treasury	182,800.00	$1,317,200.00
Common:		
Authorized and outstanding		12,000,000.00
Current Liabilities:		
Accounts payable	$152,986.94	
Preferred dividend	78,972.00	231,958.94
Reserve for accrued taxes and sundry charges		184,233.34
Surplus, May 28, 1927	$855,274.60	
Surplus for year May 26, 1928	225,991.01	1,081,265.61
		$14,814,657.89

INCOME FOR YEAR ENDING MAY 26, 1928

Total sales	$8,918,176.20
Gross Earnings	782,484.59
Less administration expenses	123,435.54
	$659,049.05
Less depreciation	300,000.00
Net earnings	$359,049.05
Reserve for Federal Income Taxes	54,086.04
	$304,963.01
6% preferred dividend	78,972.00
Surplus for year ending May 26, 1928	$225,991.01

Combined Locks To Get Colorado Board

[FROM OUR REGULAR CORRESPONDENT]

DENVER, Col., August 17, 1928.—The Combined Locks Paper Company of Combined Locks, Wis., has closed a contract with the New Mexico Lumber Company operating in the forest reserve at Timber Spur six miles north of Rico, Colorado, for 30,000 cords of pulp wood, annually. This timber will be cut in eight foot lengths and shipped to Montrose, Colorado, on the narrow gauge railroad.

With Liquid Caustic Soda,

"Delivered Cost"

Means delivered into your process

MATHIESON Industrial Chemicals

CAUSTIC SODA
LIQUID CHLORINE
BICARBONATE OF SODA
MODIFIED VIRGINIA SODA
SODA ASH
BLEACHING POWDER
ANHYDROUS AMMONIA
AQUA AMMONIA

Warehouse stocks
at all distributing centers

NOT long ago one of our representatives was discussing handling costs with a customer whose plant is so located that the delivered costs of solid and liquid caustic are exactly the same. This customer could see no economy in changing to 50% caustic liquor—until he discovered upon investigation that his handling cost on the solid material in drums was around 20 cents a hundred pounds or $4.00 a ton!

In comparing solid and liquid caustic soda, the important thing is the cost of each *delivered into your process.* To consider only works prices and freight rates is to overlook the greatest factor in favor of liquid caustic—the ease and economy of handling it in the plant. Contrast this with the handling of solid caustic—unloading many drums, transferring them to point of use, cutting them open, dissolving the solid caustic, disposing of the worthless, empty drums—at a cost ranging from $2.00 to $6.00 a ton. Is it any wonder that many large consumers prefer liquid caustic because of its great convenience, even where practically no saving is offered?

Mathieson has specialized in the distribution of caustic soda in liquid form and maintains at both Saltville and Niagara Falls plants a fleet of the latest type caustic liquor tank cars. Consumers who are interested in liquid caustic are invited to consult with the Mathieson technical staff as to approved methods of handling, storage, dilution, etc. Our Bulletin No. 270, "Liquid Caustic Soda", also contains much practical data of value to all those who use caustic soda in either liquid or solid form. Let us send you a copy of this valuable eight-page bulletin.

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Section of the
Technical Association of the Pulp and Paper Industry

AN ORGANIZATION FOR THE ENCOURAGEMENT OF ORIGINAL INVESTIGATION AND RESEARCH WORK IN MILL ENGINEERING AND THE CHEMISTRY OF PAPER, CELLULOSE AND PAPER-MAKING FIBERS GENERALLY; IT AIMS TO PROVIDE MEANS FOR THE INTERCHANGE OF IDEAS AMONG ITS MEMBERS IN ORDER THAT PROCESSES OF MANUFACTURE MAY BE MADE MORE EFFICIENT AND IMPROVED ALONG TECHNICAL LINES.

Edited by
RONALD G. MACDONALD, Secretary

The Stebbins Acid Accumulator System for Sulphite Mills

Considerable attention has been drawn of late to the Stebbins acid accumulator system for the recovery of sulphite waste liquor. The installation at the sulphite plant of the Anglo-Canadian Pulp and Paper Mills, Ltd., in Quebec City, is probably the one having attracted most attention owing to the wide publicity which has been given to this mill, which is remarkable in many respects. But though the many descriptions of the plant all mention the presence of these acid accumulators, the lay-out and arrangement has not yet been described in detail in the literature. The following description, taken from the specifications of United States patent 1,646,084, granted to T. L. Dunbar on October 18, 1927, and assigned to the Stebbins Engineering and Manufacturing Co., will doubtless prove interesting to sulphite technologists.

Objects of the Invention

The main objects aimed at are:

1) Recovery of part of the waste liquor, or even of the whole of it if the sulphite mill is operated in conjunction with a sulphate mill;

2) Pretreatment of the chips with a mixture of waste liquor and fresh acid;

3) Controlling the cooking pressure independently of the temperature, so that digestion may be carried out at a higher pressure than that corresponding to the pressure of the saturated steam used for heating the contents of the digester;

4) Obtaining efficient counter-current circulation of the liquor through the digester.

Description of the Apparatus

In using the apparatus shown in Fig. 1, the storage and recovery tanks (1) and (2) may contain a mixture of normal cooking liquor and spent liquor in suitable proportions. This mixture is forced by pump (3) and pipe (4) to the hot liquor tank (5) where it is preheated before it is fed by way of pipe (6) into one or more of the surge tanks (7), (8) and (9). From either of the surge tanks the liquor flows by gravity through pipe (10) and strainer (11) into the digester (12).

Assuming that digester No. 1 is to be cooked, steam is turned on in the usual way and this will tend to raise the pressure and heat up the chips and liquor in the digester, any gas liberated passing off by way of the pipe (10) and surge tank into the usual vent pipe (13) which conducts it to the recovery system. After the digester has been brought to normal cooking pressure, the steam is practically cut off, and the pump (14) at the bottom of the digester is put into operation to force the liquor through the strainer (11) and pipe (10) into the surge tank, from which it may be passed by way of pipe (15) back to the inlet of the pump. In this way the liquor may be circulated in either direction through the pulp a number of times.

The apparatus is so constructed that the liquor thus pumped may, if desired, be forced through the pipe (6) from one surge tank to the next or back into the hot liquor tank (5). As each

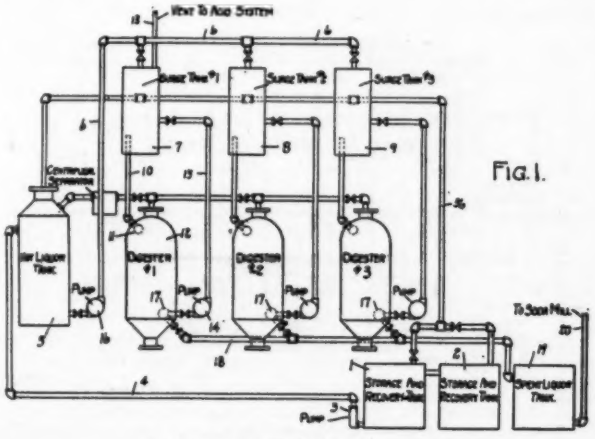

Fig. 1.

Side View of the System

digester has its own pump (14), a similar operation may take place with any digester, and the operation may be carried on either intermittently or continuously from one digester to another, until the chips have practically exhausted the strength of the liquor.

At any desired stage fresh strong liquor can be forced by pump (16) into either surge tank and circulated through one digester as a unit, or continuously through any number of digesters until the strength of the liquor in the digester or digesters has been built up to any desired point. By pumping fresh additional liquor into the digester by way of pump (16), pipe (6) and the surge tank, the pressure in the digester may be raised. The high pressure thus obtained is highly desirable in the digestion of pulp, since it permits the temperature in the digester to be maintained at a low point, which has been a desideratum in the industry for many years. The apparatus and method described allow of maintaining practically any desired pressure in the digester, and the tempera-

ture can accordingly be controlled, thus very materially reducing steam consumption and increasing the strength and improving the general qualities of the pulp.

Recovering the Liquor

The operation can be continued until the chips have been thoroughly pulped, leaving a strong liquor in contact with the pulp at the end of the digestion. At this point the liquor may be drained off from the pulp through strainer (17) and the pipe (18) to the spent liquor tank (19), where it is ready for re-use.

Only about 50 per cent of the amount of spent liquor drained from the pulp can be used again through this cooking process. Consequently, by following this procedure about 50 per cent of the spent liquor is ordinarily wasted. In order to eliminate this waste, the remaining spent liquor may be used in combination with caustic soda, there being enough sulphur in the spent liquor to form sodium sulphide in combination with an alkaline liquor, thus producing a liquor which will cook a modified sulphate pulp.

In order to reclaim this spent liquor, it is passed by way of pipe (20) to a soda mill where it is combined with caustic soda.

As an admixture of normal cooking liquor and spent liquor can be used as a pre-cooking agent and as a solvent for breaking down the gums in the wood, the process not only eliminates stream pollution by the waste liquor but also puts the latter to good account and reduces the cost of operation.

Modified Apparatus

The apparatus shown in Fig. 2 permits of counter-current circulation of the liquor through the digesters, and for this purpose two equalizer tanks, (25) and (26), are combined with the digesters.

After the pressure has been raised in the digesters to the proper degree, the pump (27) is started, and this forces liquor from the equalizer (25) up through digester No. 1, from which it may be discharged by way of pipe (28) into the lower end of digester

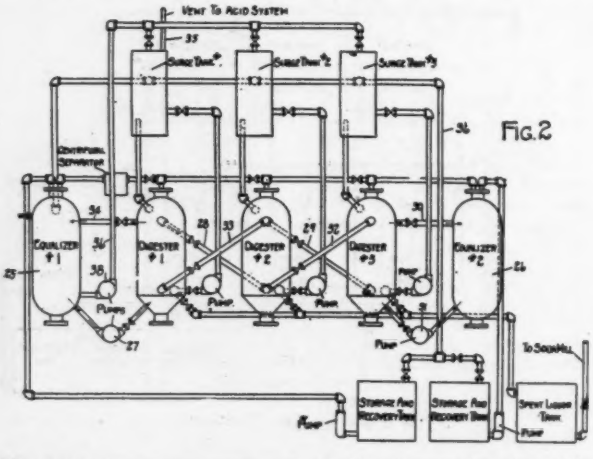

Fig. 2

No. 2. It leaves the upper end of this digester by pipe (29), which conveys it to the lower portion of digester No. 3. It flows from digester No. 3 by way of pipe (30) into the equalizer tank (26). In this way, liquor from equalizer No. 1 may be transferred by an upward flow through each one of the digesters. Then it may be returned from equalizer No. 2 by way of pump (31), which forces it up through digester No. 3, from which it is discharged by pipe (32), which leads the liquor into the bottom of digester No. 2. The liquor flows up in digester No. 2 and may be discharged from the top through pipe (33) which leads it back to the lower end of digester No. 1. It flows by pipe (34) from the upper end of digester No. 1 to the equalizer (25).

By properly controlling the valves in the lines connecting the digesters and equalizers, the direction of flow may be varied at will.

Operation of the System

In using this form of the apparatus, the digesters are started cooking with equalizer No. 1 partly filled with liquor, while equalizer No. 2 is empty. The pressure in the digesters is brought up to the proper point, and the pump (27) is then used to introduce strong liquor into digester No. 1. If equalizer No. 1 is filled up to the pipe (34), circulation may be in either direction, and by properly controlling the valves in the pipe lines the liquor may

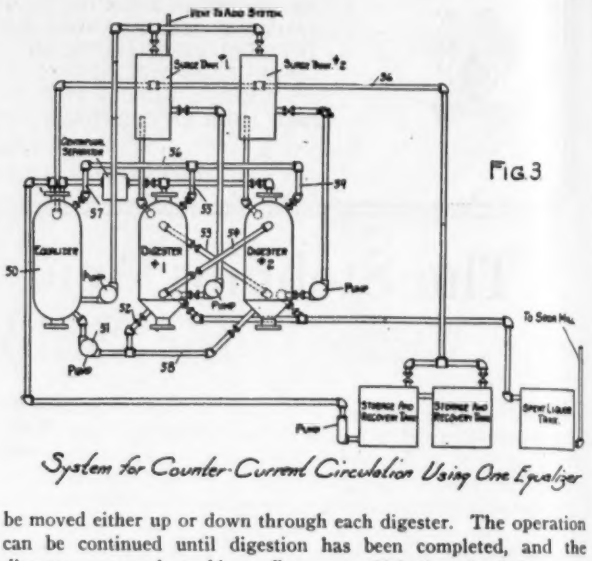

Fig. 3

System for Counter-Current Circulation Using One Equalizer

be moved either up or down through each digester. The operation can be continued until digestion has been completed, and the digesters are ready to blow off gas, at which time fresh liquor is pumped from the storage tank into a mixing tank (not shown) and this fresh liquor is mixed with hot gas relieved through pipe (35). In the mixing tank the hot gas may be absorbed by fresh cold liquor, thereby heating the latter in readiness for succeeding cooks.

Uniform recovery pressure is maintained during the cooking operation by bleeding back to the storage tank from the equalizers through pipe (36).

Another Modification

In the embodiment illustrated in Fig. 3, a single equalizer (50) is used. This equalizer will be partially filled with fresh liquor, and whenever desired this liquor is forced from the lower end of the equalizer by pump (51), through a pipe (52) into the lower end of digester No. 1. It passes up through the digester and is then discharged from the upper end by way of pipe (53) which leads it to the lower end of the digester No. 2. The liquor will then pass up through this digester and be discharged by way of pipe (54) which will lead it to the lower end of digester No. 1. The liquid may then, if desired, be discharged from this digester through pipes (55), (56) and (57) back into the equalizer tank.

Instead of operating the apparatus in this manner, the pump (51) may force the liquor through pipe (58) into the lower end of digester No. 2, and the liquor may be discharged from the upper end, either by way of pipe (59) or of pipe (54). With either method, the liquor will be fed from the equalizer back into the equalizer.—A.P.-C.

Leaves Newton Falls Paper Co.

[FROM OUR REGULAR CORRESPONDENT]

NEWTON FALLS, N. Y., August 20, 1928.—W. N. Osborn, who has been chemist at the plant of the Newton Falls Paper Company, has resigned to accept a similar position with a California firm. Mr. Osborn and wife will leave shortly for California, making the trip by motor.

Heat Recovery System for Sulphite Mills

In general, where the quick cook or direct steaming process of cooking is employed, the relief gases driven off from the liquor in the digesters during the cooking process are passed through relief gas coolers and, after being cooled, this gas is passed into the bottom of the acid storage tank or into the bottom of a recovery tower, the raw acid being sprayed into the top of the recovery tower and the gas flowed upward under pressure meets the down-flowing acid and is absorbed. Due to this cooling, the acid, when pumped into the digester, requires an excess of steam to bring the temperature and pressure up in the digester.

A. F. Richter and F. A. Augsbury, of the Stebbins Engineering and Manufacturing Co., have conceived the idea of absorbing the relief gas under pressure so as to conserve the heat units and effect considerable saving in the steam required for cooking. They have devised an apparatus for carrying out this process, for which they have obtained United States patent No. 1,653,416 of December 20, 1927.

Description of the Apparatus

In general, the apparatus consists of one or more digesters, (1), (2) and (3), an acid accumulator (4), and one or more acid storage tanks (5) and (6). At the present time it is the general practice to use three acid tanks if three digesters are used, but only two acid storage tanks are used with this invention and are combined with the acid accumulator (4), which is of the same general construction as the digesters.

The digesters are cooked in rotation, and the chips are introduced from overhead bins or chip conveyors (not shown) through sleeves (8) having covers (9). The acid is forced into the bottom of the digester through pipe (10), either by a pump (11), or by applying steam pressure to the top of the accumulator (4) and driving the acid through pipe (12) and into pipe (10). The latter is connected to the digesters by branch pipes (13), (14) and (15), each having a control valve (16), (17) and (18). The pipe (12) also is provided with a control valve (19) and the pump (11) is connected to the bottom of the accumulator by a pipe (20) having a control valve (21).

If the acid from the accumulator is to be forced into the digester by pump (11), the valve (19) is closed and the valve (21) is opened; but if steam pressure is used instead of the pump, then the valve (21) is closed and the valve (19) is opened.

This method of forcing the acid into the digesters by pressure applied to the accumulator is new, and its advantages are that this steam pressure further heats up the acid, thereby assuring a better penetration of the acid into the chips before the cooking process is started. The pipe for introducing steam into the accumulator is shown at (22) and is provided with a control valve (23).

Gas Relief System

During the cooking process, the gas from the digesters is permitted to discharge into relief gas lines. In accordance with the invention, there are two relief lines provided, one a high-pressure relief-gas line (24), and the other a low-pressure line (25). The pipe (24) is connected to each digester by two branches (26), each having a control valve (27); and similarly the low-pressure pipe (25) is connected to each digester by two branches (28) each having a manually controlled valve (20) and an automatic check valve (30).

During the early portion of the cook, and also towards the end, the pressure of the relief gas is relatively low, and during these periods the low-pressure relief-gas is admitted to the low-pressure line (25), which is connected to the upper portion of the accumulator at the point (31). As the digesters are worked in rotation, there is an almost constant flow of low-pressure gas into the accumulator when three or more digesters are used. In that case the cold acid from the storage tank (5) is continuously forced by the pump (32) through pipe (33) and sprayed into the top of the accumulator. This cold liquid showering in the tank (4) condenses and absorbs the hot incoming relief gas from the pipe (25). If only one or two digesters are connected up to the acid accumulator, the pumping of acid is necessarily intermittent.

During the time that low-pressure gas is being relieved from some of the digesters into the top of the accumulators, high-pressure gas is being relieved into the high-pressure line (24), and carried into the bottom of the accumulator from other digesters. This high-pressure gas passes into the tank (4) at the point (34) and bubbles up through the acid in the accumulator, and is thereby absorbed into the liquor and builds up its strength. A three-way plug cock (35) is provided in the high-pressure line (24) and is connected to the top of the accumulator by a short pipe (36), so that gas from the high-pressure line can be admitted into the top of the accumulator when the pressure in the latter drops to a point below that caused by the static head of the liquor in the accumulator. This is particularly necessary when the last cook

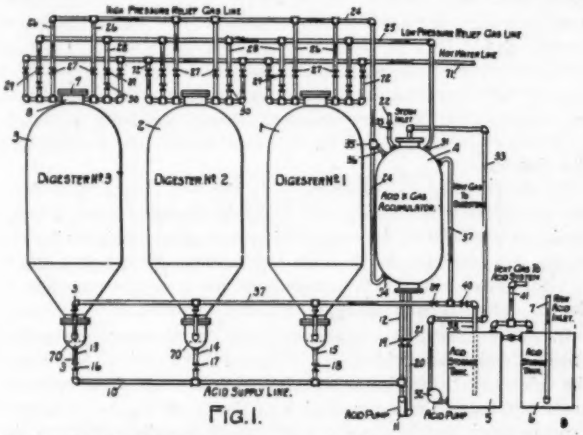

FIG. 1.

is being finished preparatory to a shut-down, and also at certain periods when the digesters get out of step from their regular sequence of operation.

Cooking Cycles

We shall now assume that digesters Nos. 1 and 2 are already cooking and No. 1 has been on for eight hours and No. 2 for four hours. No. 3 digester has just been filled with chips and acid, and the cooking process just started. At this time digesters 1 and 2 will both be relieving into the high-pressure relief line (24). This gas passing into the bottom of the accumulator and bubbling up through the acid is absorbed. As a result, the acid in the accumulator is heated up so that this heated liquor may be forced by the pump (11), or by steam introduced through pipe (22), from the accumulator into the bottom of digester No. 3. As soon as the cook is started in No. 3, the valve (29) to the low-pressure relief-gas line is opened and the gas is driven out by the application of steam to this digester. Should the pressure in the top of the accumulator be higher than the pressure in the digester, the check valve (30) will close and prevent the gas from flowing from the accumulator back into the digester; but as soon as the pressure in No. 3 digester is higher than that in the accumulator, the gas will flow from the digester into the top of the accumulator where it will be absorbed by the acid which is being sprayed into the accumulator from the storage tank by way of pipe (33).

Any gas that is not absorbed during this process will pass through the vent line (37) into the lower end of one or more of the digesters; or it may be passed through the pipe (38) into the

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lower portion of the storage tank (5) where it will be absorbed by the acid in this tank. Suitable valves (39) and (40) are provided in these pipes to control the flow. A vent line (41) is also provided for the storage tanks (5) and (6), this vent line being led to the acid system (not shown), so that the gas which forms in the upper portion of the acid storage tanks will be absorbed in the acid-making system, thus preventing loss of gas.

As soon as No. 3 digester has been brought up to approximately 40 pounds pressure, the valves (29) of that digester are closed, and the valves (27) of the same digester are opened, so that the high-pressure gas is relieved into the line (24). At this time digester No. 3 will have been cooked about four hours, and No. 1 will be ready to be dropped in pressure. As soon as the pressure in No. 1 drops, the valves (27) of that digester will be closed and the valves (29) of the same digester will be opened to permit the low-pressure gas to travel to the accumulator.

Modified Construction

In the modification illustrated in Fig. 2 there are shown two accumulators, (50) and (51), hooked up with pressure or thermostatic control devices (52) and (53), (these are both standard equipment and can be purchased on the market) so that the relief gases from the digesters and liquor from the acid storage tanks (54) and (55) are automatically changed from one accumulator to the other. That is, when one accumulator is up to a predetermined pressure, the gases and liquor are automatically switched over to the other accumulator, leaving the first ready to discharge its contents into a digester whenever desired, this being automatically accomplished by opening the acid supply line leading into the digester.

As the pressure and temperature in the first accumulator drop, due to emptying its contents and filling the digester, steam is automatically admitted to the top of this accumulator, maintaining the proper pressure therein to force the acid to the digester which is being filled. During this period the low-pressure vent line at the top of the digester undergoing filling is opened.

In this modification (24a) designates the high-pressure relief-gas line, which is provided with a control valve (24b). Just below the valve (24b), the pipe is branched at (24c), and these branches are connected to the upper portion of the accumulators. The pipe extends down and is connected by valved branches (24d) to the lower portions of the accumulators. The low-pressure relief-gas line is designated (25a) and is connected by branches (25b) to the top of each accumulator. The acid is supplied to the accumulators by means of a pump (56) which forces the liquor through a pipe (57) having valved branches (58) connected to the tops of the accumulators. The acid is fed from the accumulators to the digesters by means of a pipe (59) which is connected by valved branches (60) to the lower ends of the accumulators. Steam is supplied to the accumulators by means of a pipe (61) having valved branches (62) connected to the tops of the accumulators.

As soon as the digester has been filled from the first accumulator, the valve in the acid supply line to the digester is closed and the steam at the top of the accumulator is shut off by closing the valve in the branch (62). This causes the temperature and pressure in this particular accumulator to drop, and as soon as it has dropped sufficiently, the automatic pressure or thermostatic control devices (52) and (53) automatically change the valves, so that this accumulator will again fill with acid from the storage tanks (54) and (55), while the gas from the digester is being relieved into the same. It will therefore be noted that the two accumulators work automatically in conjunction with each other and automatically fill and absorb gas, and empty themselves by manual control.

When these two accumulators are used, the check valves of the digesters are connected up electrically, so that when the low-pressure check valve (30) closes, the operating valve (27) on the high-pressure relief line is automatically opened.

Manual auxiliary control in this instance is also provided, so that the digesters can be handled in this manner in case the automatic equipment should for any reason fail to function. Occasionally a check valve on an automatically controlled valve will stick, and under such circumstances the digesters may be controlled by manual valves, and that is the reason why it is preferable to use two valved branches (26) and two valved branches (28) for each digester.

Washing in the Digester

With this method of handling the digesters, a strainer is provided at the bottom of each digester, so that when the cook is finished the liquor is drawn off at the bottom of the digester through this strainer. In Figs. 1 and 3 such strainer is designated as (70). It holds back the cooked pulp and allows the liquor to be drained out and sent to the sewer or the waste liquor recovery system, as the case may be.

While the liquor is being drained out the digester, hot water

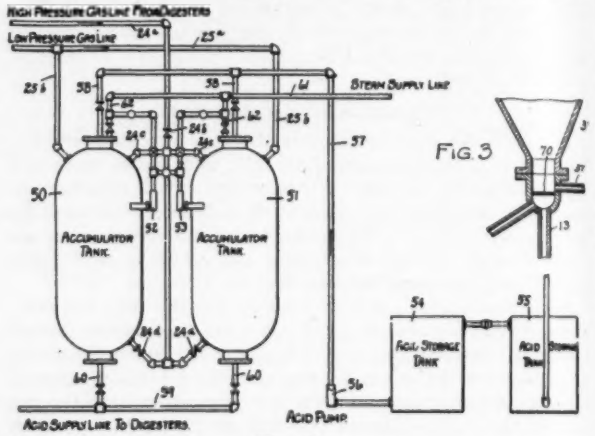

FIG. 2

FIG. 3

is pumped in at the top through the line (71), which is provided with valved branches (72). This water draining down through the pulp partially washes it, so that when the dumping valve (not shown) is opened, the pulp is allowed to go into the blow pits (not shown). The pulp is thus partially washed and therefore does not contain much acid.

As soon as the pulp has been partially washed in the digester, the dumping valve is opened, and the hot water entering at the top of the digester will wash the contents of the digester out into the blow pits. By this procedure the fibers do not explode, as is the case when the contents of the digester are blown out under pressure; the fibers, therefore are not injured and the pulp produced is of better quality than when the contents of the digester are blown out into the blow pits under the pressure in the digester.

It is also preferable to arrange a hot water wash out line in the blow-off elbow, so that this hot water comes in on a line parallel to the center line of the discharge pipe leading to the pits, thereby having a siphon effect in removing the contents of the digester.—A.P.-C.

Leaves Calcasieu To Go To Sweden

Uno G. Fryklund, for the last three years Assistant General Superintendent of Calcasieu Sulphate Paper Company, Elizabeth, La., in full charge of all manufacturing operations, has resigned his position with that company to accept the superintendency of a large pulp mill in Sweden. Mr. Fryklund sails from New York on September 8, on the *Gripsholm*.

Prior to coming to Elizabeth, Mr. Fryklund was employed by the Mosinee and Tomahawk, Wis., mills, where he gained an enviable reputation as an export in the manufacture of Kraft pulp and paper.

He carries the best wishes of all his associates in America and their hopes for his continued success in his home land.

Measuring the Bulk of Paper

Final Report on the Development of a Standard Method

The investigation relative to the measurement of the bulk of paper which has been under way at the Bureau of Standards in cooperation with the Technical Association of the Pulp and Paper Industry in their program of standardization of paper testing methods has been completed and a report of the results has been prepared for publication. Some months ago a preliminary report, including some results obtained with the Perkins pressure bulker and a suggested tentative standard method, was sent out to manufacturers, publishers, and others interested in the measurement of bulk with a request for information and suggestions toward further work. A number of replies were received from which it was evident that there is little uniformity in the methods and procedures for measuring bulk, or in expressing the results of the tests. The measurements are made with the thickness gauge, the pressure bulker, the sliding caliper or rule, with hand pressure or with the pressure of a weight. The pressures when definitely known vary from less than a pound to 50 pounds per square inch. The sequence of operations may or may not follow a definite time schedule. The measurement is made on one sheet, a few sheets, or many sheets, sometimes small and sometimes large. The results are interpreted and expressed as the thickness of a single sheet, the thickness of a number of sheets, the number of sheets to the inch, the ratio of thickness to weight, specific volume, the ratio of apparent volume to fiber volume. In an effort to bring some order into this chaos a study has been made of the different instruments and methods of measurement and of such variables as the size of the sheets, the thickness of the pack, the size of the pressure surfaces, the amount and duration of the pressure applied, and recommendations have been made for a standard procedure and a standard method of expressing the results.

Perkins Pressure Bulker

The Perkins pressure bulker was studied in some detail. The instrument was found to involve more friction than is desirable. Within reasonable limits the size of the sheets, the size of the pressure surfaces, the duration of pressure and repeated application of pressure have comparatively little effect on the results. But it was found necessary to calibrate the pressure gauge, to apply a definite pressure, and to use a sufficient number of sheets to give the necessary accuracy. The thickness of the pack is not proportional to the pressure applied. Between the pressures of 5 and 50 pounds per square inch the thickness changed from 3 to 14 per cent, depending on the kind of paper measured. The deformation resulting from pressure is almost completely elastic.

Thickness Gauge Variables

In the study of thickness gauges for measuring bulk it was found that the pressure exerted by the ordinary rotating-spindle type of micrometer-caliper varies considerably according to the character of the surface in contact with the spindle. Measurements made with a standard type of thickness gauge on several kinds of paper indicated that the results on single sheets are apparently greater and involved larger accidental errors than measurements on a pack of paper. It was concluded that a certain packing effect is involved in bulk measurements and that the practice of calipering a single sheet or a very few sheets for the purpose of determining bulk is to be discouraged. A minimum pack thickness of a tenth of an inch is recommended for bulk measurements with the thickness gauge. The effect of humidity on the thickness of a pack of paper was made evident by the thickness tests, but the effect could not be determined by measuring single sheets, since the thickness gauges used in paper testing cannot measure a single sheet with sufficient accuracy.

Since the pressure applied to a bound volume varies from 40 or 50 pounds per square inch during binding to only a few ounces during use, a bulking press was designed to apply heavy or light pressure uniformly distributed over the entire pack in order to simulate to some extent the actual and extreme pressure conditions met with in the life history of a bound volume, and to have a logical basis of comparison for bulk data obtained by different methods.

Comparative Bulk Tests

Comparative tests were made with the pressure bulker, the thickness gauge, and the bulking press, various pressures being used. Eleven kinds of paper were tested. It was found that the results obtained with the pressure bulker at a pressure of 5 pounds per square inch agree very closely with those obtained with the thickness gauge of standard type when a pack of paper of adequate thickness is used, and that the relative values by these two methods closely parallel those obtained with the bulking press. It was also found that specific bulk is roughly proportional to compressibility. The thickness of 100 sheets varied from 33 to 69 hundredths of an inch, depending upon the pressure applied and the kind of paper tested. The specific bulk (ratio of thickness to weight) of the papers tested ranged from less than 0.5 to 1.3. The publication will give the results in tabular and graphical form.

Standard Method Recommended

A standard testing method and manner of expressing the results of bulk determinations are recommended as follows:

The bulk tests shall be carried out in an atmosphere of standard hygrometric state (65 per cent relative humidity and 70 degrees Fahrenheit) as prescribed by the Technical Association of the Pulp and Paper Industry, and the paper to be tested shall have been properly conditioned in this atmosphere. The pack thickness shall be measured by one of the following alternate procedures.

(1) A dial thickness gauge of a type conforming to the specifications of the Technical Association of the Pulp and Paper Industry (Paper Testing Methods, 1928, p. 55) shall be used. A pack of paper not thinner than 0.1 inch shall be measured for thickness on the four corners by means of this gauge, a margin of at least half an inch between the pressure foot and the edges of the pack being maintained during the measurement. The average of the four readings shall be used in calculating the bulk values.

(2) A pressure bulker shall be used, having a pressure foot not less than 1 square inch in area, and being provided with means of applying a definite known pressure of 5 pounds per square inch and means of measuring the distance between the pressure surfaces. A pack of paper approximately 1 inch in thickness shall be measured at the four corners between the pressure surfaces of this bulker under a pressure of 5 pounds per square inch, a margin of at least half an inch between the pressure foot and the edges of the pack being maintained during the measurement. The average of the four readings shall be used in calculating the bulk values. In applying the pressure the specified pressure shall be approached from zero. The pressure gauge shall have been previously calibrated in the region of the specified pressure.

In either case the results shall be expressed as:

(a) Bulking thickness = Thickness in hundredths of an inch of a 100-sheet pack,

(b) Specific bulk =

$$\frac{\text{Bulking thickness}}{\text{Weight of standard ream (25x40—500) in pounds}}$$

Current Paper Trade Literature

Abstracts of Articles and Notes of Papermaking Inventions Compiled by the Committee on Abstracts and Bibliography of the Technical Association of the Pulp and Paper Industry

Clarence J. West, Chairman

Standard Method of Measuring Bulk of Paper. Anon. Paper Trade J. 85, No. 23, 62 (Dec. 8, 1927). A preliminary investigation carried out on sized and supercalendered printing, machine finished printing, machine finished rag printing and news print showed that: (1) above 30 lbs. per sq. in. the coefficient of compressibility is small and practically constant for a given paper; (2) the indicated bulk is independent of the size of the pressure surfaces within limits of 1 to 5 sq. in.; (3) varying the size of the test sheets from 2.25 to 8 in. sq. caused a maximum difference in bulk of 0.25 per cent; (4) greatest accuracy is obtained when bulk is determined in packs containing 250 to 500 sheets; (5) the difference in bulk at high (40 lbs.) and low (5 lbs.) pressures was small for the supercalendered paper, but considerable for the most compressible paper; (6) repeated applications of pressure lower but little the indicated bulk at a given pressure. A tentative standard procedure is suggested.—A.P.-C.

Official Paper Testing Methods. Anon. Paper Trade J. 85, No. 19, 60-61 (Nov. 10, 1927). Detailed description of the official methods of the Technical Association of the Pulp and Paper Industry for determining folding endurance, mineral coating, and mineral filler in paper.—A.P.-C.

Use of the Microscope for Examination and Photography of Paper. L. V. Foster. Paper Ind. 9, 1151-1153 (Oct. 1927); Paper Trade J. 85, No. 15, 47 (Oct. 13, 1927). A description of a practical microscope embodying the principle of adjustable annular oblique illumination.—A.P.-C.

Moisture Equilibrium of Egg Case Fillers, Flats and Pads. Sidney D. Wells. Paper Trade J. 85, No. 14, 56-57 (Oct. 6, 1927); Paper Ind. 9, 1506-1509 (Dec., 1927). The leading points demonstrated in the tests conducted as described are as follows: (1) Egg-packing material came to moisture equilibrium in an unheated warehouse in a period of about 48 days. Only about 14 days were required to bring it to 90 per cent of its final moisture content; (2) Under typical cold storage conditions the time required to come to equilibrium was only 2 weeks: (3) Approximately twice as much water was held by the material under the cold storage conditions as when at equilibrium in the unheated warehouse; (4) Lime-cooked straw and spruce groundwood had practically the same moisture content when in equilibrium; Nu-process stock contained 3 per cent less; (5) The pack containing the least water was the combination of cupped flats and Nu-process fillers; the first on account of their low weight and the second because of their relatively low attraction for moisture; (6) The moisture content of this combination at equilibrium in cold storages was 12 oz. as compared with 15 oz. with white fillers, flats and pads.—A.P.-C.

Modified Method for Determination of the Copper number of Paper. B. W. Scribner and W. R. Brode. Paper Mill 50, No. 45, 35-36 (Nov. 5, 1927). Paper Trade J. 85, No. 22, 47-48 (Dec. 1, 1927). In testing high-grade rag fiber bond papers, because of the heavy glue surface sizing and hard finish, uniform and accurate results can be obtained only when the sample is finely ground, as in a Koerner leather grinder. The following technique is recommended for the determination: heat a mixture of 25 cc. of Fehling's alkaline tartrate solution and 125 cc. of distilled water to 100 deg. C. in a 500 cc. wide-mouthed erlenmeyer placed in a 30 per cent calcium chloride bath maintained at 110 deg. to 115 deg. C., add 1 to 1.5 g. of ground paper, maintain at not less than 100 deg. C. for about 30 minutes, filter while hot on a 5.5 cm. filter paper in a Büchner funnel, wash with 250 cc. hot water, transfer the filter paper and fiber to a 250-cc. beaker, add 25 cc. of molbdate solution (100 g. of sodium molybdate (43 per cent Mo) and 75 cc. of 83 per cent phosphoric acid dissolved in a solution containing 275 cc. of concentrated sulphuric acid and 1,750 cc. of distilled water), let stand a short time, add 25 cc. of water, stir to disintegrate the filter paper, filter as before, wash with 200 cc. of cold water so as to remove all the blue color, titrate the filtrate with standard potassium permanganate solution (6.25 g. in 41 of water).—A.P.-C.

Maintaining Uniformity of Paper. E. G. Milham. Paper Mill 50, No. 48, 4, 6 (Nov. 26, 1927). A discussion of the meaning of the term "paper quality" and of the means available for controlling it and keeping it uniform.—A.P.-C.

Testing for Iron in Paper. Th. Bentzen. Paper Ind. 9, 1,512-1,513 (Dec., 1927). When using ferrocyanide for the detection of traces of iron, presence of acid in hot solutions turns the reagent blue or green even in absence of iron. By cooling the acidified heated solution before adding the reagent, this false reaction is less evident. But as a whole potassium ferrocyanide is not a trustworthy reagent for detecting the presence of iron.—A.P.-C.

T. C. B. Photo-Colorimeter. J. Pinte. Rev. Gen Teinture: Impression, Blanch. et Appret 5, 955-973 (Aug., 1927); Pulp and Paper 26, 171-173 (Feb. 9), 201-205 (Feb. 16, 1928). Rene Toussaint. Bull. Soc. Encour. Ind. Nat. 126, 421-430 (June, 1927); Paper Ind. 9, 1702-1703 (Jan., 1928). A given color can be characterized by a curve obtained by plotting the intensity of each shade present (blue, orange, red, yellow, etc.) as compared either with a pure white (*e.g.*, plaster or magnesia) or with a standard color. In the T.C.B. photo-colorimeter the intensity is measured by means of a photo-electric cell, consisting of a glass bulb filled with argon under low pressure and coated inside with metallic potassium (acting as cathode); inside the bulk is placed a tungsten ring (as anode). Under the action of light the potassium cathode emits electrons which make the current vary according to the intensity of the light, and the variations are measured by means of a galvanometer or ammeter. The intensity in the various parts of the spectrum is measured by interposing suitable color screens. The method of measuring and duplicating colors is described, and the chief applications of the instrument are enumerated.—A.P.-C.

Built-Up Fiber Board Tester. T. A. Carlson. U. S. pat. 1,612,415, Dec. 28, 1926; Paper Trade J. 86, No. 2, 59-60 (Jan. 12, 1928). The instrument is designed to give a measure of the amount of rough handling which a fiber box can withstand. It involves means for applying a combined action of tension, tearing and repeated bending to a specimen while it is bent over and drawn firmly against a sloping edge. In the case of a scored specimen representing material from an edge of a fiber box, the specimen may be bent initially at an angle of approximately 90 deg., the bending being parallel to and at the score, so that the latter may be in contact with the sloping edge during the test. The number of times the specimen is bent through a predetermined angle and the maximum tension applied before the specimen is torn apart is taken as an indication of the amount of rough handling that the box will withstand.—A.P.-C.

Machinery

Vacuum Drum Washers. H. A. Morrison. Paper Trade J. 85, No. 16, 53 (Oct. 20, 1927). Paper Mill 50, No. 42, 12; 16 (Oct. 15, 1927). Brief discussion of the advantages of vacuum drum washers for the removal of spent liquor from cooked stock and of residual bleach and soluble reactions products resulting

from bleaching from bleached pulp, and for the recovery of chemical solvents or process reagents, at high concentration, in the treatment of fiber for specialty purposes.—A.P.-C.

Dorr Vacuum Filter. A. Anable. Paper Trade J. 85, No. 16, 51 (Oct. 20, 1927). A brief illustrated description of the Dorrco Filter and discussion of its merits.—A.P.-C.

Continuous Vacuum Filters in the Pulp and Paper Industry. M. W. Davis. Paper Trade J. 85, No. 15, 56 (Oct. 13, 1927); Paper Mill 50, No. 42, 18, 36 (Oct. 15, 1927). Brief discussion of the use of continuous vacuum filters as pulp thickeners, save-alls and combined pulp thickeners and save-alls.—A.P.-C.

Dickinson Pulp Screen. J. A. Dickinson. U. S. pat. 1,639,797, Aug. 23, 1927; Paper Trade J. 86, No. 6, 61 (Feb. 9, 1928). A number of screening units, comprising screen plates mounted in pairs on a frame which is closed in between the screen plates on all sides, are pivotally mounted in a vertical position in a pulp vat and given a slight oscillating motion. Baffles are provided at alternate ends of successive screening units to force the stock to pass around all the units. Inside the frame of each unit is a vertical hollow shaft, fitted with rigid baffles and provided with ports to allow the white water to pass out.—A.P.-C.

Fidalgo Pulp Drying System. R. D. Kehoe, Pulp and Paper 25, 1621-1623 (Dec. 15, 1927). Brief description of the system with a discussion of its merits.—A.P.-C.

Erkensators: New Method for the Production of Really Clean Paper. Anon. World's Paper Trade Rev. 88, 1450-1454 (Nov. 4, 1927); Paper Maker and Brit. Paper Trade J. 74, Annual No., 62-64 (1927). A brief description of the device, consisting essentially of a centrifuge designed and constructed to do the work of a riffler or sand trap (removing both light and heavy impurities), and also, if desired, of a screen.—A.P.-C.

Cleaning Paper, Rags, Etc. A. Aeldert, Eng. pat. 277,037. The apparatus consists of a casing in the center of which is a conical rotating screen through which the impurities are sucked inwardly, and the outside of which is provided in known manner with teeth, claws, knives, or the like. The feed hopper for introducing the material is at the narrow end.—A.P.-C.

Reconstruction of Papermaking Machinery. W. C. Whittaker. World's Paper Trade Rev. 88, 2098-2160 (Dec. 30, 1927). A discussion of the factors to be taken into consideration in reconstruction or alteration of the beater room, paper machine room and cutter and reeler room.—A.P.-C.

Some Features of Recent Developments in Paper Machines. B. Malkin. Pulp and Paper 25, 1477-1479 (Nov. 17, 1927). Brief outline of some of the features of machines recently installed or at present under construction by Dominion Engrg. Wks., Montreal, particularly as regards the drives used for the drier sections.—A.P.-C.

Paper Machines. Max Wintermeyer. Industrie Papetiere 7, 43-54 (Feb., 1928). A brief description of some of the latest types of paper machine constructed by the J. M. Voith firm of Heidenheim.—A.P.-C.

Suction Roll. Beloit Iron Works. Eng. pat. 279,768. The roll is designed and constructed to permit adjustment of the suction chamber to the interior of the cylinder, to provide improved means for supporting the vacuum compartment in the roll and also to make use of the roll shaft as a means of supporting the vacuum compartment, and to provide simple and practical mechanism for permitting the withdrawal of the suction chamber from within the roll and for replacing a wire on the roll.—A.P.-C.

Suction Roll. Beloit Iron Works. Eng. pat. 281,590. This improvement comprises a suction roll which is mounted on a shaft which has each of its opposite ends supported on a pedestal, one of which has an elongated bearing and the other is constructed of upper and lower sections, the lower section being movable from side to side to form a space below its upper section.—A.P.-C.

Paper Machine Couch Roll. S. A. Macivor. Eng. pat. 276,103. The couch press comprises an upper couch roll mounted in arms suitably pivoted so as to allow of adjusting the pressure on the lower rolls, of which there are two mounted in fixed bearings. An additional lower couch roll may be provided, mounted in pivoted arms and pressed upwards against the upper couch roll. The latter is covered with rubber or similar non-absorbent material.—A.P.-C.

Couch Roll of Wet Press for Paper Machines. J. K. Horsburgh. Eng. pat. 276,884. The upper couch or press roll, which may be either solid or perforated, is provided with a felt adapted to absorb moisture from the wet paper web before the latter leaves the wire. The water absorbed by the felt is removed either by passing it through one or more presses or over a suction box. The roll itself may be jacketed also.—A.P.-C.

Chip Spreader for Digesters. T. C. Folin. Norw. pat. 44,022. Papir-Journ. No. 15, 194 (1927). A large tube through which the chips pass into the digester is equipped with a number of helical baffles which impart a rotary motion to the stream of chips, thus filling the digester uniformly on all sides.—C.E.P.

Chipper for Large Sized Wood. Norw. pat. 44134. Papir-Journ. No. 15, 194 (1927). The wood passes through one or more pairs of rotary knife blades which dig into the wood and tear out chips in the direction of the fiber.—C.E.P.

Study of Fourdrinier Wire Life. John Campbell and H. G. Wales. Paper Ind. 9, 1876d, 1876f (Feb., 1928). There is a direct relation between the temperature of the stock in the head box and the decrease in life of fourdrinier wires. Of the three main factors affecting wire life, abrasion increases with the temperature on account of the decrease in the miscosity of the water, and consequently also in its lubricating qualities, with rising temperature; corrosion by the alum added to stock also increases with temperature due to the greater velocity of the reaction between the metal and alum; and incrustation of the wire similarly increases due to increase in the rate of precipitation of the colloids in the water by the action of the alum.—A.P.-C.

Cardboard and Pasteboard Machine. O. Leonhart. Eng. pat. 276,549. In this machine the several plies of pulp are couched together by means of a felt conducted over all the cylinders. The felt is guided by rolls which are permeable to water and which let the water through so that the plies do not stick to the guide rolls.—A.P.-C.

Alexander-Youngchild Wire Cleaner. Anon. Pulp and Paper 25, 1545-1546 (Dec. 1, 1927). A brief description of the construction, operation and performance of this device.—A.P.-C.

Elimination of Deckle Straps on Fourdrinier Machines. G. S. Witham, Jr. U. S. pat. 1,629,607, May 24, 1927; Paper Trade J. 85, No. 23, 63-64 (Dec. 8, 1927). The invention consists essentially in permitting the stock to flow unrestrictedly over the edges of the wire and mixing the overflow with the stock from the consistency regulator and reconveying it to the slice box. Deflecting plates are provided to prevent the overflow stock from splashing on to the breast and table roll bearings and on to the floor. Wing plates extending about 10 to 12 in. from the point where the stock first strikes the wire are provided along each edge of the sheet, the bottom edge of the plates being just above and out of contact with the wire. They do not form a tight seal but tend to momentarily restrain the side flow of the stock, thus reducing the width of the thinner portion of the sheet along each edge.—A.P.-C.

Minton Drier Installation at Kenogami. Ogden Minton. Paper Ind. 9, 1535-1536a (Dec., 1927). A description of the Minton vacuum drier installed about a year ago at the Kenogami mill of Price Bros. & Co., and its performance, with an account of engineering problems encountered and solved in building it and putting it into successful and satisfactory operation.—A.P.-C.

Draining Steam-Heated Driers. J. Melrose Arnot. U. S. pat. 1,633,273, June 28, 1927; Paper Trade J. 85, No. 25, 44 (Dec. 22, 1927). A curved flap or blade extends the whole length of the cylinder and has one edge bent to form a volute or scroll, its other parallel edge being plain. The blade and scroll together form a scoop and each end of the scroll part is mounted co-axially

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with the drier roll. The scroll part communicates with an exhaust conduit extending to the exterior of the cylinder through the trunnion. At its free edge the scoop lies close to or lightly touches the wall of the cylinder.—A.P.-C.

Vacuum Paper Machine Drier. Ogden Minton. Pulp and Paper 26, 61-68 (Jan. 19); 107-111 (Jan. 26, 1928). A description of the design, construction and operation of the Minton vacuum drier, with special reference to the installation at the Kenogami mill of Price Bros. & Co.—A.P.-C.

Paper Drier. R. Marx. Eng. pat. 280,776. When the paper is dried by passing over one or two very large drying rolls to impart a finish to one side of the sheet, the large drying roll (or each one of them) is provided with an air- or steam-jacketed hood which encloses practically the whole portion of the roll with which the paper is in contact. Hot air is blown in between the roll and hood at each end of the latter, and exhausted by a duct approximately midway between the two inlet ducts.—A.P.-C.

Ventilating System for Paper Machine Driers. S. Milne. Eng. pat. 277,181. The frames supporting the drier rolls are made hollow to form air passages, transverse air-distributing pipes are arranged across the machine between opposite frames, and air-supplying pipes are connected to the frames at suitable points.—A.P.-C.

Continuous Trough Drainer for Paper Machine Drying Cylinders. A. D. Harrison. Paper Trade J. 85, No. 23, 61-62 (Dec. 8, 1927). The steam is admitted into the roll by means of a long tube screwed at one end into the steam supply chamber and supported at the other end by a bracket carried on the other bearing of the drier roll. In order to obtain an even distribution of steam throughout the length of the drier the pipe is drilled at equal intervals with small holes, forming nozzles which direct the steam into the inner surface of the drier uniformly along its length. The tube forms the top member of a bridge-like structure inside the drier, the bottom member being the water-catching scroll. The two members are braced together to form a rigid structure which will not allow of any deflection. The water catcher is formed in the shape of a scroll designed so that the condensed water will be delivered to and held in the trough. The siphon pipe dipping into the trough has ample clearance between the open end and the bottom of the trough, to give the full area at entrance in order to reduce the resistance to the flow of water to a negligible quantity. It is claimed that a paper machine fitted with this drainer will give absolutely even drying across the sheet and permit the speed of the machine to be increased.—A.P.-C.

Paper Winder. Cameron Machine Co. Inc. Eng. pat. 276,778. In this improved machine the shaft on which the paper is being wound moves along the surface of a guide and thence over the winding means so that a second winding shaft may be brought into position for winding by the time the first shaft is full.—A.P.-C.

Calender Rolls. C. G. Haubold Akt. Eng. pat. 276,599. Alternate rolls are made of hardened or unhardened steel, which are chromed on their surfaces. The surface thus given is hard and smooth and is not susceptible to attack or deterioration by atmospheric and other influences of weather, chemically active media in the air of the factory, moisture, etc. The chroming of the rolls not only enables the output of the calenders to be increased but also results in a lengthening of the life of the rolls. The chromed surface may be obtained by electrolytic deposition of chromium on a steel roll revolubly suspended in the electrolytic bath. These rolls are claimed to be specially useful in making parchment paper, a much better glaze being produced.—A.P.-C.

Power Requirements of Paper Machines. H. W. Rogers. Paper Trade J. 86, 53-56 (Jan. 12, 1928). A discussion of the power requirements of the various sections of a paper machine in the light of power readings of sectional electric drives taken over a period of several years. The selection of motors is also discussed, showing the reasons for the adoption of the type of drive which has been selected by the General Electric Co.—A.P.-C.

Drive for Machine Driers. B. A. Malkin. U. S. pat. 1,588,796, June 15, 1926; Paper Trade J. 86, No. 2, 57-59 (Jan. 12, 1928). A longitudinal shaft, parallel to the length of the paper machine, is driven at a point preferably midway between its ends. Driven by bevel gearing are the drier roll driving spindles, which are provided with worms which engage with worm wheels secured to the ends of the drier roll spindles. Each spindle is adapted to drive two or more drier rolls at different levels and is arranged at an angle to the horizontal driving shaft. The worm and worm wheel and bevel gearing are enclosed in gear cases which have anti-friction bearings or thrust bearings to take up any unevenness which may occur in the drive. All shafting is provided with means to allow for expansion of the parts due to the variations in temperature which occur in such machines.—A.P.-C.

Power Requirements of Paper Machines. H. W. Rogers. Pulp and Paper 25, 4197-1500 (Nov. 24, 1927); Paper Mill 50, No. 48, 18, 36, 38 (Nov. 26, 1927). A discussion stressing the importance of proper selection of motors for sectional electric paper machine drives.—A.P.-C.

Waste in the Finishing Room. P. S. Ordway. Paper Mill 50, No. 41, 10, 12, 38-39 (Oct. 8, 1927). A discussion of the causes, classification and possible ways of reducing broke.—A.P.-C.

High Speed News Print Machines. G. A. Macklem. Paper Mill 50, No. 42, 20-26 (Oct. 15, 1927). An outline of the development of the fourdinier machine to its present stage, describing the main features of some of the high speed news machines constructed by the Beloit Iron Works.—A.P.-C.

Rewinding Webs of Paper. C. H. Webster. Eng. pat. 279,578. The tubular cores of remnant reels to be rewound are carried at their respective ends upon a pair of rotatable cones oppositely disposed in alignment, which are adapted to have a transverse movement imparted to them to permit of the tubular cores being mounted in position on the cones, or the tubular cores being withdrawn, and to allow the remnant reel when mounted in position to be moved or adjusted transversely according to the position at which the web is to be rewound on the new reel. Thus the respective pedestals while being adapted for independent movement required for the mounting and withdrawal of the remnant reels are adapted to be moved together for the transverse adjustment or lay of the web in rewinding.—A.P.-C.

Sharpening the Blades of Paper-Cutting Knives. L. Jupet. Industrie Papetiere 7, 15, 19 (Jan., 1928). In order to have a strong blade and at the same time to clear it readily from the paper, the cutting edge should have a 30 deg. bevel; and a short distance back of the edge the blade should be chamfered to make an angle of about 25 deg. with the length of the blade.—A.P.-C.

Wall Paper. L. Clemens. Eng. pat. 279,805. Paper cardboard, or corrugated cardboard adapted for use as wall paper for decorating purposes and the like and capable of being rolled up is provided on one or both sides with a striped design comprising separate continuous strips of differently colored or figured paper attached to the paper by a suitable adhesive. The strips may be applied in the machine on which the paper, cardboard, etc., is made, and, in the case of the corrugated cardboard, may be corrugated with and applied to the corrugations or to the flat backing thereof. —A.P.-C.

Special Papers

Air Proof Wrappers. E. Blank. Eng. pat. 276,501. These air-proof wrappers for packing small articles or quantities of medical preparations, are made of paper or cardboard coated with several layers of cellulose esters or derivatives of cellulose produced by dipping. Coloring substances may be added to make the wrapper impermeable to light.—A.P.-C.

Protected Cardboard Packings. L. Rado and J. Modern. Eng. pat. 278,775. Ordinary paper or cardboard packings are very sensitive to moisture. This process of protecting cardboard containers against the damp consists in coating them on either or both sides with composite aluminum foil, the paper backing of

this foil being attached to the cardboard by an adhesive, preferably of a waterproof nature.—A.P.-C.

Manufacture of Paper for Chromolithography. Trebor. Papier 30, 545-546 (May, 1927); Paper Trade J. 85, No. 20, 51 (Nov. 17, 1927). Brief discussion of the means of obtaining the qualities required in this grade of paper, which are flatness, uniform and rather heavy calendering, the minimum expansion or contraction with variations in moisture content. An instrument is described suitable for the easy and rapid determination of the expansion of the paper after immersing in water for a suitable length of time.—A.P.-C.

Direct Heat Drying of Boards. F. A. Darrah. Pulp and Paper 25, 1647-1648 (Dec. 22, 1927). A discussion of the phases of board drying, particularly the application of heat, bringing out the merits of drying by direct contact with a rapidly moving current of air heated at a high temperature (about 450 deg. F.), which is reheated and recirculated indefinitely.—A.P.-C.

History of Laminated Wall Board Patents. Joseph Rossman. Paper Trade J. 86, No. 3, 45-47 (Jan. 19, 1928). Brief abstracts of 71 United States patents from 1870 to June, 1926—A.P.-C.

Textile Fabrics from Paper. Frederick Grove-Palmer. Paper Trade J. 86, No. 4, 47-49 (Jan. 26, 1928). Brief description of the production, dyeing and cleaning of paper textiles.—A.P.-C.

Carbon Paper. F. Peltzer & Co. Eng. pat. 279,375. Carbon paper is manufactured cheaply by employing very thin paper and applying a very thin film-like coating. The carbon paper, being cheap, need not be used more than once and can therefore be permanently attached to the original and duplicate sheets, for instance, by adhesive, staples or fasteners. The viscosity of the usual coating material is reduced by the addition of stearic acid, carnauba wax, montan wax, fatty acids, neutral fats, liquid or solid hydrocarbons, higher alcohols, and the like. The coating material may be applied at a temperature of 80 deg. to 100 deg. C. The weight of the coating may be from 9 per cent to 25 per cent of the weight of the paper.—A.P.-C.

Coated Paper. H. C. Mitchell. Eng. pat. 277,733. Paper or other surfaces suitable for window tickets and show cards are prepared for writing or other impressions, as with a dry pen, by giving the surface a coating similar to that of an art coated paper, such as is obtained by the use of china clay and blanc fixe, and then applying ink or color to the surface so that moisture is accessible to the surface upon which the ink or color is applied. The color or ink may be applied by means of a half tone print. A style, such as the reversed end of a pen nib, may be used for writing, the act of writing removes the ink or color and exposes the under surface. Any adhering substance may be removed by a sponge. The product may be varied by writing with a pen dipped in ink of a different color from that applied to the paper.—A.P.-C.

Manufacture of Cigarette Papers. Jean Oddon. Papier 30, 983-90 (Sept.); 1095-1105 (Oct., 1927). A detailed description dealing with raw materials, preparation of the halfstuff and method of running on the paper machine.—A.P.-C.

Scientific Investigation Into the Use of Oiled Paper for Fruit Wrapping. Anon. Pulp and Paper 25, 1437-1438 (Nov 10, 1927). Experiments carried out in England have shown that odorless mineral oil, whether applied with the wrapper or with sawdust, is a most efficient preventive against scald in apples in gas storage, and that tissue paper wrappers impregnated with mineral oil have a slight beneficial effect in retarding fungal rotting in addition to their influence in preventing scald.—A.P.-C.

Paper for Window Envelopes. R. E. Lofton. Paper Trade J. 85, No. 17, 113-114 (Oct. 27, 1927). A discussion of the qualities required of envelope windows, together with a summary of tests on a number of samples of glassine and similar papers and of one-piece window envelopes, and suggested specifications for the windows of one-piece and of two-piece envelopes.—A.P.-C.

Manufacture of Luminous Papers. Anon. Mon. Papeterie Belge 7, 179-180 (Mar., 1927). Paper Trade J. 85, No. 23, 60 (Dec. 8, 1927). Brief description of their manufacture, bringing out the difference between radio-active and phosphorescent papers.—A.P.-C.

Waterproof Paper. L. Mellersch-Jackson and Bennet, Inc. Eng. pat. 280,083. Up to the present waxed paper clippings or waste have been considered practically non-reclaimable. The present improvement has for its object the utilization of such waste. A paper furnish comprising waxed waste paper together, if desired, with sulphite fiber, mixed paper or other engine stock, is placed in the beater with sufficient water to ensure circulation of the mass. The furnish is then heated so that the waterproofing material is softened or melted. The heated furnish is then beaten to effect a disintegration of the paper, the wax constituent is suitably dispersed and fixed, and the stock run off on a paper machine.—A.P.-C.

Impregnating and Rendering Rigid Pieces of Paper. Manufacture des Machines Auxiliaires pour l'Electricite et l'Industrie. Eng. pat. 280,386. This is a modification of Eng. pat. 215,726 and refers particularly to improvements effected in the method of impregnating and essentially to the synthetic resins to which the main patent refers. The cooling means are connected with the stove which is heated and in which the articles are treated. The stove comprises a double wall in which is effected the circulation of hot oil for heating, a coil being immersed in the oil and in which water circulates for cooling. The stove is heated by a circulation of hot oil in the double wall and cooled by the passage of the oil through an external refrigerator.—A.P.-C.

Waterproofing Wood Pulp Articles. J. J. H. Sturmey. Eng. pat. 276,395. In this process the pulp articles are coated with waterproof solution during manufacture and allowed to remain at a temperature well above the boiling point until the articles are set, and the waterproof solution thoroughly incorporated.—A.P.-C.——

Paper Twine, Etc. Brit. United Shoe Machy. Co. Ltd. Eng. pat. 278,404. The machine is constructed so as to produce a string or twine of such uniformity of cross section and stiffness as to render it suitable for use as pegging material in driving pegs into work in shoe making or repairing. In forming such a string, etc., from flat paper strip, the twisting is preferably effected in two stages, the strip being impregnated with sizing before the first twisting and again sized after the second twisting to obtain on the finished string a hardened surface coating of sizing.—A.P.-C.

Lithographer's Paper Difficulties. Anon. World's Paper Trade Rev. 89, 546-552 (Feb. 17, 1928). Some practical hints to help him to meet his difficulties successfully.—A.P.-C.

Power and Power Plant

Synchronous and Induction Motors and Their Control. A. B. Gates. Pulp and Paper 25, 1466-1470 (Nov. 17, 1927). Discussion of synchronous and induction motors and their merits, with a description of various types of controls used therewith.—A.P.-C.

Application of Electricity in Paper Mills. A. D. Flint. Paper Mill 50, No. 43, 37-38, 40 (Oct. 22, 1927). A discussion of the various applications of electricity prevalent in the paper mills throughout the Miami Valley.—A.P.-C.

Switchboard Layout for a 500-Ton Paper Mill. S. E. M. Henderson. Pulp and Paper 25, 1473-1476 (Nov. 17, 1927); Paper Trade J. 85, No. 23, 57-60 (Dec. 8, 1927). A description of two suitable schemes of connections for a 500 ton paper mill with four machines and a power site suitable for supplying the entire demands of the mill (including electric steam generators) about forty miles distant.—A.P.-C.

Electrical Experiences at Price Bros. & Co. Ltd. N. D. Paine. Paper Mill 50, No. 46, 10, 38-41 (Nov. 12, 1927); Pulp and Paper 25, 1470-1473 (Nov. 17, 1927); Paper Ind. 9, 1536d-1536f (Dec., 1927). A brief description of the electrical layout and experiences at the Kenogami and Riverbend mills.—A.P.-C.

Variable Speed Transmission Stimulates Output. Reginald Trautschold. Paper Trade J. 85, No. 17, 102-108 (Oct. 27, 1927).

A discussion of the mechanical, hydraulic and planetary types of variable speed transmission, giving illustrations and examples of their use in pulp and paper mills and emphasizing the beneficial results obtained by their use.—A.P.-C.

Speed Reducer Installation Illustrated. Reginald Trautschold. Paper Trade J. 86, No. 2, 42-48 (Jan. 12, 1928). A number of examples are given of particular types of speed reducer applications in paper mill service.—A.P.-C.

Kennedy High Density Stock Pump. A. X. Kennedy. U. S. pat. 1,583,978, May 11, 1926; Paper Trade J. 86, No. 7, 46-47 (Feb. 16, 1928). The pump comprises a casing having a single bearing at one side and a suction pipe at the other side. A shaft journaled in the bearing and extending into the suction pipe carries an impeller within the casing and one or more propellers spaced some distance from the impeller within the suction line. It is claimed this pump can handle successfully stock at a consistency as high as 7 per cent.—A.P.-C.

Lubricants and Lubricators in Paper Mill Service. Reginald Trautschold. Paper Trade J. 86, No. 4, 36-40 (Jan. 26, 1928). Indications are given as to economical and efficient ways of making use of those lubricants with which paper mills are familiar.—A.P.-C.

Profitable Stoker Installations. Reginald Trautschold. Paper Trade J. 85, No. 19, 44-50 (Nov. 10, 1927). An article drawing attention to the common basic considerations of liberating heat units, with examples of a number of underfeed stoker installations in paper mill power plants.—A.P.-C.

Ruths Accumulator in the Paper Industry. Anon. Paper Trade J. 85, No. 17, 74, 76 (Oct. 27, 1927). Brief discussion of its advantages in allowing the boilers to operate at constant load and maximum efficiency in spite of wide variations in steam demand, as exemplified by the installations at Price Bros. Riverbend mill and at the Algonquin Paper mill at Ogdensburg.—A.P.-C.

Resigns From Taggart Corporation

[FROM OUR REGULAR CORRESPONDENT]

ALBANY, N. Y., August 20, 1928.—Jacob F. Amos, secretary and treasurer of the recently organized Taggart Corporation, and one of the most widely known paper mill men of Northern New York, has tendered his resignation and will sever connections with the firm with which he has been associated as an executive for nearly a quarter of a century. The desire of Mr. Amos to continue his residence in Watertown where he has become an influential citizen is said to have been the main reason for his resignation. The recent reorganization of the Taggart Company as the Taggart Corporation, a unit of the Carlisle industries, entailed the removal of the executive offices from Watertown to New York and Mr. Amos as treasurer was slated to take up his duties in the New York office. His future plans are undecided but he is said to have several propositions in view.

Mr. Amos became identified with the Taggart Brothers Company in 1906 coming from Syracuse where he was manager of the Standard Flour Milling Company. After taking up his residence in Watertown he became an important factor in the business life of the city. At present he is vice president of the Watertown Savings Bank and a member of the board of directors of the Northern New York Trust Company.

No announcement has been made as yet as to who will succeed Mr. Amos in the Taggart Corporation.

Longview Fibre Co. Making Additions

PORTLAND, Ore., August 17, 1928.—Framework is being installed at the plant of the Longview Fibre Company's plant at Longview, Wash., for an addition to the machine shop, which will be used to house the pipe shop.

The new Fourdrinier paper machine recently installed is now turning out its designed capacity of between 25 and 30 tons of wrapping paper daily, and the paper board machine is producing approximately 90 tons of finished product every 24 hours.

Du Ponts Plan Big Rayon Plant

RICHMOND, Va., August 20, 1928.—An eight-unit rayon plant, representing a total investment estimated at $46,000,000, is now contemplated by du Pont interests for a Waynesboro site recently optioned, it was learned last week. A single unit, $5,000,000 plant was first planned, but increased demand for du Pont textiles resulted in a change of plans, according to definite information furnished the Waynesboro Chamber of Commerce by du Pont engineers.

The proposed new rayon development will be the largest in the world and its production will put Virginia ahead of any other State in the world in rayon output, it was said.

Word of the proposed expansion reached Gov. Harry F. Byrd and reports were confirmed by officials of the Waynesboro Chamber of Commerce by long-distance telephone.

The first plans of the du Ponts was to launch a $5,000,000 unit by September 1. A large site on the south fork of the Shenandoah was put under option. Thus far options remain in effect, but no definite step has been taken pending completion of necessary surveys.

Several years may be required to complete an eight-unit plant, it was stated, but it was indicated today that when construction begins it will be rushed at top speed. Thousands of workmen will be employed on construction, and when ready for operation each unit may employ more than 800 workmen.

A cellulose-acetate process, said to have been recently acquired from the Rhodiaseta Company, of France, by the du Ponts, is to be used at Waynesboro under present plans. This process is very different from the Viscose process used in most Virginia rayon plants. Main raw material is cotton wastes. Cellulose, which makes up cotton, is blended with acetic acid to form cellulose acetate, and this subustance is treated by secret processes and spun into fiber.

This process has been under experiment for a number of years in France, England and in the du Pont research laboratories. The fabric now yielded by the process is said to be stronger and more water resistant than many other synthetic fibers, and will take dry cleaning without damage.

Who Reads the Wochenblatt?

WASHINGTON, D. C., August 20, 1928.

Dear Mr. Macdonald:

I have just discovered a supplement to the *Wochenblatt fur Papierfabrikation* entitled "Technologie und Chemie der Papier- u. Zellstoff-Fabrikation." Although I have been interested in paper making literature for eight years I have never seen this particular supplement before. I wonder if you would inquire through the columns of the Technical Section whether any of the members of TAPPI know of a complete set of this publication which might be available to me in connection with the preparation of the Bibliography of Paper Making. The magazine appears to contain a number of technical articles and I would like to list them in the bibliography if possible. Very truly yours,

C. J. WEST.

Please communicate directly with Dir. Clarence J. West, National Research Council, B and 21st Streets, Washington, D. C.

B. M. Hill & Co. Appointed Agents

CINCINNATI, Ohio, August 20, 1928.—P. E. Calo, vice-president of General Naval Stores Company, Inc., and manager of their Chicago office, was in Winnipeg, Canada, recently, and while there made arrangements with B. M. Hill & Co., Ltd., 48 Princess street, to represent his company in the sale of Newport and Acme Turpentine, Wood Rosin, and Pine Oil in the provinces of Manitoba, Saskatchewan and Alberta. Mr. Calo returned home by way of Minneapolis, where he stopped over to look after company matters in that city.

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What Is the Cash Basis of Reporting Income?*

By Frederick Leon Pearce[1]

Probably one of the oldest historical methods of accounting is that frequently denominated as the cash receipts and disbursements basis. This system of bookkeeping appears to be rather generally understood by the ordinary business man in the street and employed by him in his private computations of profit. The cash method of accounting has, indeed, been so often recognized and accepted by both the courts and the United States Board of Tax Appeals that the authority for its use as the basis for making returns of income can scarcely be questioned.

An examination of the various Federal income taxing statutes indicates quite clearly that more than one system of accounting is acceptable as the basis upon which returns may be prepared. Indeed it appears that any method of accounting regularly employed by a taxpayer in the keeping of his books is authorized as the basis of his return provided that the resulting computation clearly reflects his net income. This fact is evidenced by the following excerpt from the Revenue Act of 1918:

"Section 212(b). The net income shall be computed upon the basis of the taxpayer's annual accounting period . . . in accordance with the method of accounting regularly employed in keeping the books of such taxpayer; but if no such method of accounting has been so employed, or if the method employed does not clearly reflect the income, the computation shall be made upon such basis and in such manner as in the opinion of the Commissioner does clearly reflect income."

This section has been repeated in each of the subsequent revenue acts with substantially the same phraseology. Under these provisions a number of systems of accounting have been definitely recognized, notably accrual, cash receipts and disbursements, installment, and completed contracts bases. There are probably others, less frequently discussed, such as the variations in inventory methods, and in the treatment of special items in particular industries.

It should be obvious that net income figured upon one basis would not be identical with that which would have resulted had another system of bookkeeping been adopted. Certainly net income computed according to installment principles for any taxable period produces quite a different figure from that resulting upon the accrual basis. Apparently all that the revenue acts require is that the method of accounting regularly employed by a taxpayer shall clearly reflect income in accordance with the principles of the system which has been adopted.

That this is the underlying intent of the taxing statutes is indicated by a further provision of the Revenue Act of 1918:

"Section 200. That when used in this title . . . The term 'Paid,' for the purpose of the deductions and credits under this title, means 'paid or accrued,' or 'paid or incurred,' and the terms 'paid or incurred' and 'paid or accrued' shall be construed according to the method of accounting upon the basis of which the net income is computed under Section 212."

This cross reference again directs attention to the provision of Section 212(b)—that the net income shall be computed in accordance with the method of accounting regularly employed in keeping the books of the taxpayer. According to Section 200, therefore, the very terms of the statute are to be construed pursuant to the system of bookkeeping adopted by each taxable entity.

An examination of a number of recognized accounting text books, however, has failed to disclose any comprehensive exposition of the detailed working of the so-called cash basis. The proper method of handling cash receipt and disbursement items must, therefore, be ascertained almost entirely from published decisions in matters involving income tax questions. As a consequence, this article will be confined to an effort to elicit from these cases the principles of operation of the cash basis system of accounting from the point of view of determining net income for income tax purposes.

A. When Are Items of Income or Expense to be Reported on a Cash Basis?

The distinction between the cash basis of accounting and any other system recognized for income tax purposes appears to rest in the time element. The period in which an item should be reflected in income under an accrual system is explained in detail in many accounting texts. An examination of these publications, nevertheless, affords little light upon procedure under a cash basis. Our authority regarding the proper period for deducting a disbursement for expense or for including a receipt of income can, however, be readily determined from the published tax decisions relating to the cash basis. What is the test, disclosed in these rulings as to the proper period for reporting such items?

1—The Period During Which the Item Accrues Is Not the Test

In the *Appeal of S. P. Freeling*, 7 B.T.A. 1238, the petitioner received in the year 1922, $15,000 as compensation for services to be rendered by him over a period of three years. Although admitting this fact, the Board in its decision announces the proposition that upon a cash basis the "amount paid for personal services to be performed in the future, is income when received." In Office Decision 948 (4 C.B. 180) rents for the years from 1914 to 1920, inclusive, were received in the years 1919 and 1920. It was

* National Income Tax Magazine.

[1] Member of the District of Columbia Bar and Certified Public Accountant of North Carolina.

ruled that upon a cash basis the rents could not be allocated to the years for which they accrued, but that the entire sums were income when the payments were received. See also W. L. Coley, Receiver of Red Bud Shoe Co., v. Pickering (Dist. Ct. So. Dist. of Ill., decided February 24, 1927) for treatment of sales upon a cash basis. It should be obvious, therefore, that the fact that an item of income relates to a past or a future period, does not affect its treatment upon the cash receipts and disbursements basis.

This proposition is also true with respect to deductions authorized by the revenue acts. In the Appeal of P. L. Mann, 8 B.T.A. 221, a proportionate part of the profits were set aside each year under a contract as compensation of the manager, to be paid at the end of a ten year period. In its decision the Board agreed with the contention of the Commissioner that no deduction of the amount set aside for services rendered could be taken by the petitioner on a cash basis prior to the time payment was made. In Regulations 33 (revised 1918), Article 8, paragraphs 109 and 110, it is ruled, in regard to insurance premiums paid in advance covering a period of several years, that, when books are kept on a cash basis, the entire amount is deductible in the year in which the premium is paid.

The same conclusion is reached regarding credits specified in the income taxing statutes. In the matter of Chester D. Greisemer v. Commissioner, 10 B.T.A. 386, decided January 30, 1928, the petitioner resided in France during the years 1918, 1919 and 1920, and became liable for income taxes levied by the French Government. The petitioner compromised the taxes originally assessed and made payment in March, 1922. The Board, on finding that the taxpayer was on the cash receipts and disbursements basis, held that the petitioner was not entitled to the credit for foreign taxes, claimed under Section 222 of the Revenue Act of 1918, until those taxes had actually been paid.

From the foregoing decisions it is evident that the period, whether past or future, in which an item accrues is not determinative of the taxable year in which that item is to be reported on a cash basis.

2—The Period Over Which the Benefit Extends Is Not the Test

In Office Decision 1039, 5 C.B. 130, it is held that the expenses of a national campaign of advertising are deductible as a business expense only in the return for the year in which such expenses were paid (on a cash basis), and may not be carried as a deferred asset to be charged off over a period of years, even though the benefits from such expenditures undoubtedly extended over such period.

It is obvious that in the matter of P. L. Mann (supra) the petitioner had the benefit of the manager's services for the period of ten years. Nevertheless for the first nine of those years no deduction was allowed for the amount of compensation set aside under the contract. Conversely, in the case of the prepaid insurance premiums (paragraph 109, Reg. 33) the benefit of the insurance protection will continue long after the year in which the deduction is allowed upon the cash basis.

In the Appeal of the Utah Orpheum Company, 3 B.T.A. 1041, the petitioner, leasing and operating a theatre, gave a note for interest due during the year 1919. The note was not paid until a subsequent year. Although the taxpayer had the benefit of the use of the money in the year 1919, the Board decided that, since the petitioner was on a cash receipts and disbursements basis, it could not deduct the interest which was not paid in that year.

It should be obvious from the foregoing cases that the period, during which the benefit is flowing to the taxpayer, does not control the time for taking deductions upon the cash basis.

3—The Period in Which the Corresponding Income Is Earned Or Expense Is Paid Is Not the Test

The rule is laid down in Hayes v. Commissioner, 7 B.T.A. 936, that expenses incurred and paid in prior years are not deductible on a cash basis in a later year, when the income is reported, in the earning of which income such expenses were incurred. In the Appeal of P. L. Mann (supra) the manager's compensation was computed as a proportionate part of the profits for the years in question. Despite this fact, the deduction was not allowable until a later year in which the compensation in question was paid.

It is apparent that the Utah Orpheum Company (supra) employed the borrowed money in its business and secured income therefrom in the year in question. Nevertheless, the interest deduction is not allowed in that year. Even on the installment basis, which is allowable as a modification of the cash basis, the expenses may not be allocated over the period in which the income is earned, but must be deducted when paid. O.D. 844, 4 C.B. 123.

In the recent case of Sanford & Brooks Co. v. Commissioner, promulgated April 9, 1928, 11 B.T.A.,[2] the question related to the proper time for reporting compensation for expenditures made upon government works. The amounts were disbursed in the years 1913 to 1916 and recovered only after judgment obtained in the Court of Claims in 1918, had been affirmed by the U. S. Supreme Court in 1920. The petitioner contended that the compensation should be placed in the years when the disbursements were made. In its opinion the Board said that "On the cash basis, it would, of course, be included in gross income only for 1920, since it was then paid."

Whether the corresponding income is earned in a period prior or subsequent to that in which the expenses productive of such income, are allowed as deductions, does not appear, from the decisions examined, to affect the time for reporting an item on a cash receipts and disbursements basis.

4—The Period in Which the Expense Is Disbursed or the Income Is Received in Cash Is the Test

An analysis of all the decisions cited in the foregoing discloses the rule that an expense is deductible when paid and income is reportable when received in cash (or its equivalent) by a taxpayer upon the cash basis.

In the *Appeal of Freeling* (supra) "the amount . . . is income when received." Similarly in O.D. 948 "the entire sums (of rent) were income when the payments were received." In *Coley, Receiver, v. Pickering* (supra) the court held that the sales were to be reported in the tax return for the year in which they were paid for.

The deduction for compensation in the Mann appeal was denied because not paid until a subsequent year. The insurance premiums are deductible in the year in which paid. The credit for foreign taxes in the Greisemer appeal is deferred until a later year in which the payment was made. In O.D. 1039, the advertising expenses are deductible only in the return for the year in which paid. The deduction of interest was disallowed to the Utah Orpheum Co. because not paid until a subsequent year. In *Hayes v. Commissioner* the deduction for expenses was denied because incurred and paid in prior years. Even on the installment basis of reporting income, expenses must be deducted when paid.

The rule that an income receipt is reportable in, or an expense disbursement is deductible from, the income of the year in which payment is made appears to control for a taxpayer who keeps his books and makes his returns upon a cash basis.

B—Capital Items

The treatment accorded capital receipts and expenditures appears as the only limitation upon the rule that disbursements are deductible from, and receipts are reportable in, income in the year in which payment is made or received. In general it may be said that a capital disbursement represents a more or less permanent investment of the funds of the enterprise (like the purchase of land, or the liquidation of a capital liability); a capital receipt represents the recovery of part or all of the funds invested upon a capital disbursement (such as the recovery of cost upon the sale

[2] Not yet reported.

of land) or the creation of a capital liability (as upon receipt of borrowed money or of investment by the proprietor.)

1—Capital Disbursements

It is necessary in classifying disbursements to decide in the first instance whether a payment is made for an expense or for a capital item. Apparently after the capital items have been identified, the balance of the disbursements are expenses. After the expenditures have been properly classified, the expense disbursements are disposed of according to the rule summarized under the preceding caption, being deducted from income when the payment is made. Since capital expenditures are forbidden by statute as deductions from income they are evidently required to be set up as an investment subject to future disposition.

Opinions appear to have differed so widely upon the subject, that the identifying of the capital items among the disbursements is not a simple task. With little text authority to rely upon, a list of capital items can only be elicited from specific instances in published decisions and rulings. Due to the volume of litigation which this single point appears to have developed, however, the list of capital expenditures has become quite comprehensive though by no means at present complete.

Capital expenditures are impliedly defined, in Article 24 of Regulations 45, to be for items of plant, equipment, etc., which have a useful life extending substantially beyond the year. In Article 110, machinery, buildings, amounts expended on development of farms, orchards and ranches, breeding and dairy animals, and the price of an automobile are mentioned as capital investments. In Article 293 the following are included in the definition of capital items: amounts paid for increasing the capital value or for restoring the depreciated value of property, amounts expended for securing a copyright and plates, the cost of perfecting title to property, architects' fees in connection with the erection of a building, and commissions paid in the purchase of securities.

In its opinion in *H. B. Miller v. Commissioner,* 10 B.T.A. 383, promulgated January 30, 1928, the Board of Tax Appeals held that a disbursement for the acquisition of a leasehold is a capital expenditure on a cash basis, on the express ground that "a lessee by virtue of the terms of his lease acquires an interest in real estate." The further announcement is made that "amounts expended in the acquisition of real estate, and consequently of an interest therein as well, are capital expenditures."

How then may we distinguish between these two classes of disbursements? Capital expenditures evidently cover only the cost of acquiring and improving property, usually tangible and of some permanence, such as plant, buildings, machinery, equipment, animals, automobiles, copyrights, patents, securities, and any interest in lands including minerals and oil in place, and standing timber. Emphasis apparently is placed upon the investment of capital in the acquisition of an article or estate in lands which is generally denominated as property.

Expense disbursements cover generally payments for articles of short life which are currently consumed within the year, for personal services not productive of property and for "rights" as distinguished from "property," or "estates in land"; interest in contrast to the principal of notes and securities; current rent as distinguished from the purchase of a leasehold; and the distinction made by some writers between "real" and "nominal" accounts.

The decision, whether a particular disbursement is for capital or expense, can be reached only by analogy to the particular items which have been held to be expenses or capital expenditures in the various published decisions and rulings.

2—Capital Receipts

The distinction in regard to capital receipts appears to have been but seldom in controversy, for there are few decisions determining this point upon a cash basis. Identification of capital receipt items will, therefore, remain a difficult problem until more enlightenment is given upon the subject in further decisions.

[2] Not yet reported.

In the case of *Ludey v. U. S.,* 274 U. S. 295, the Supreme Court decided that depreciation allowable under the Revenue Acts must be used to reduce the basis of a capital asset sold. Evidently then upon a cash basis, the cash investment is to be reduced each year by the depreciation allowable upon a capital asset. Amounts received in excess of the depreciated basis are, therefore, income, instead of return-of-capital receipts.

The most difficult problem of capital receipts appears to arise regarding sales of property wherein the payments received extend over several taxable periods (but not coming within the statutory installment basis). The business men, reasoning upon the cash basis of an older generation, have contended that the investment must be fully returned in cash before any profit is realized. The Commissioner has contended that the obligations received (promises of the buyer to pay) must be valued in the year of the sale; such a method, however, results in the computation of a profit upon a cash basis which earning has not been realized in cash. In this connection it is to be noted that the method outlined in the regulations (Reg. 69, Article 46) appears to produce the same result upon either the cash or accrual basis.

The ascertainment of the proper methods to be followed regarding the accounting for various types of sales upon a cash basis appears to remain for future determination. The tendency toward the solution of this question, however, may be drawn from a recent decision of the Board of Tax Appeals, in the case of *Washington Land Company v. Commissioner* (promulgated February 2, 1928), 10 B.T.A.[2] The opinion states that "the conversion of cash into some other form of capital asset, though literally a cash disbursement, is a capital expenditure, and this is true whether the asset acquired is intended for sale or trade or is to be permanently devoted to the use of the business. . . . The down payments received by the petitioner in 1919 represented a return of capital, leaving the petitioner's investments in the properties, at the close of 1919," evidently the balance of the amounts invested therein less the payments received. "The purchases and sales of these three properties and all payments in connection therewith, were completed in 1920 and the profits derived from the sales were realized in that year."

C—Non-Cash Adjustments

There are, however, other factors to be reflected upon the books, which do not arise from any concurrent cash transactions, but which nevertheless must be considered in cash basis accounting. These adjustments relate to depreciation, depletion, obsolescence, bad debts and other losses in the value of capital items. An adequate discussion of this group would, however, too greatly extend the scope of the present article. This phase of the system must, therefore, be left with the remark that under the authority of the Ludey case it would appear that entries should be made upon the books in accordance with the allowances authorized in the taxing statutes.

Summary

A summary of the cases cited leads to the following conclusions regarding the operation of the cash basis of accounting. The capital expenditures in the disbursements must first be identified and set up as investments of the business, subject to future disposition. Payments in liquidation of capital liabilities are to be charged to those accounts. The expense disbursements, apparently comprising the residue remaining after the capital items have been segregated, are deductible from income at the time payment is made (subject to the statutory provisions regarding deductions).

The cash receipts likewise require careful analysis. Those items representing the creation of capital liabilities are evidently to be set up on the books for subsequent liquidation. The return-of-capital receipt is to be credited to the investment account for the capital asset affected, and any excess over the proper "basis" is reportable as income apparently at the time the cash is received. The balance of the cash receipts, after the capital items have been disposed of, are evidently income to be reported at the time the payments are received.

Cost Section

News of the Fox River Valley Paper Industry

Union Bag Mill at Kaukauna, Wis., Being Removed to Orange, Tex., Where New Modern Plant Will Be Placed in Operation Shortly—Organization Will Continue Manufacturing Paper at Kaukauna—Hospital Specialty Co., of Cleveland, Ohio, Buys Monette Co.

[FROM OUR REGULAR CORRESPONDENT]

APPLETON, Wis., August 20, 1928.—Removal of the bag mill of the Union Bag and Paper Company, of Kaukauna, Wis., to Orange, Texas, was announced last week. The bag mill has been closed down and the machinery is being prepared for shipment. The company is in the midst of establishing its bag department in the southern city, where a modern mill will be placed in operation soon.

Plans of the company are to continue manufacturing paper at the Kaukauna plant and perhaps using the output in the Texas mill for making bags. Oswald Berndt, superintendent of the bag department, has been transferred to the new plant and is directing the preparations. Several other Kaukauna families also will move to Orange.

Hoberg Subdivision Sold

The Monette Company, a subsidiary of the Hoberg Paper and Fibre Company, of Green Bay, Wis., has been sold to the Hospital Specialty Company, of Cleveland, Ohio, according to announcement of J. M. Conway, general manager. This will have little effect on the Hoberg company, as the manufacture of various products will continue under contract.

Since the Monette Company was only a sales and distributing organization, the Cleveland concern merely takes over a marketing proposition. The deal covers all trade marks, brands and good will and no consideration has been announced. Products handled by the Monette company included sanitary napkins, baby diapers, facial paper, neck strips for barber shops and beauty parlors, and cellu-cotton rolls for hospitals. The business was started in 1926.

Consolidated Replacements

Cessation of operations for three weeks has taken place at the main mill of the Consolidated Water Power and Paper Company, Wisconsin Rapids, Wis., due to the necessity of making important repairs.

According to a statement of Stanton Mead, vice president and general manager, it was necessary to replace the trash tracks ahead of the water wheels, and the beams supporting them, as these have been in constant use for twenty-five years. Inasmuch as this required the lowering of water at the head race, all mill operations had to be suspended.

All departments are taking advantage of the shutdown, in order to make repairs and replacements. Two of the paper machines installed when the mill was built are being overhauled and improved. Employees who are not assisting in the work are taking their vacations, in accordance with a vacation policy established by the company a year ago.

This same situation affects the company's mill at Biron, and a reduced schedule of operation is in force there. The sulphite supply and the power supply from the main mill makes this necessary. Gates of the dam are being repainted and repaired also.

News of the Industry

Hereafter the Menasha Printing and Carton Company, of Menasha, Wis., a subsidiary of the Marathon Paper Mills Company, will be known as the Wisconsin Products Company. An amendment to its articles of incorporation has been passed to that effect and filed with the secretary of state, according to W. A. Brooks, assistant secretary.

All of the concrete has been poured for the foundation of the new finishing mill of the Appleton Coated Paper Company, of Appleton, Wis. C. R. Meyer & Sons Company has the contract. The building is 240 by 104 feet in size, and will be one story with basement. Machinery from the old finishing room will be moved into it when completed.

Vocational schools of Wisconsin will start their classes in paper mill foremanship training early in September, according to H. G. Noyes, state director. He will be assisted by M. W. Smith, formerly engaged in foremanship training for the board of education of Kansas. Classes will be held at Stevens Point, Wisconsin Rapids, Mosinee, Wausau, Eau Claire and several other cities.

Wisconsin paper manufacturers have discovered that a recent decision of the Interstate Commerce Commission relative to rates on Indiana shipments does not include one of the most important items of all, toilet paper. It was assumed all along that this commodity was included with paper towels and napkins, as had been done before. The commission has replied on inquiry stating that the failure to list toilet paper was not an omission. A petition is to be filed so this amendment may be made before the rates take effect October 1.

Reasonableness and propriety of freight rates on news print in car loads on all rail, and rail and water shipments from producing points in official classification territory are to be investigated by the Interstate Commerce Commission. This action was taken on its own motion, according to information received. The investigation will include Wisconsin, Minnesota, Michigan and Canada. A preliminary conference is to be held in Washington, D. C., on September 12 to arrange schedules for the hearings.

Carl Arnold, an unmarried man of 33 years, was drowned last week while working for the Nekoosa-Edwards Paper Company, of Port Edwards, Wis. He attempted to walk across the dam while the water was running over the top, slipped and was carried away by the current.

Paper Cutting Machine Firms Merge

[FROM OUR REGULAR CORRESPONDENT]

DAYTON, Ohio, August 20, 1928.—The A. A. Simonds Company of this city, manufacturers of planing and paper cutting machinery; the Worden Tool Company of Cleveland, and the L. and I. J. White Company of Buffalo, N. Y., have just effected a merger, it is announced here, following the incorporation of the concern at Columbus.

The capital stock is given at $1,050,000 with the authorization of 17,500 shares of stock, of which 10,000 are preferred at $100 each and 7,500 no par common.

The three plants are to be acquired at $1,178,568, according to the announcement of the merger. The incorporators are R. C. Corwin, Irvin G. Bieser and Warren A. Ferguson, all of this city.

Herbert R. Simonds, president of the A. A. Simonds Company, stated he was not prepared to issue a statement concerning the details of the amalgamation pending completion of plans.

The A. A. Simonds Company is one of the oldest establishments of its kind in the country and has been serving the paper and kindred trades for many years. It was founded by the late A. A. Simonds, father of the president, and who was widely known in industrial circles.

K. R. Cobine Leaves Hopper Paper Co.

[FROM OUR REGULAR CORRESPONDENT]

TAYLORVILLE, Ill., August 20, 1928.—The Hopper Paper Company announces the resignation of K. R. Cobine, general manager of the company, effective August 14. Mr. Cobine, the company states, will take a long deserved vacation.

END-OF-GRAIN SUCTION BOX COVERS

A Trial Installation Will Demonstrate Operative Economy and Better Product.

This improvement consists of 2 aluminum side-rails, which are permanently screwed to top flange of the suction box. Between these rails are diagonally inserted wooden sections of select green Vermont maple, with the grain of wood UPRIGHT. Write for prices and list of prominent users.

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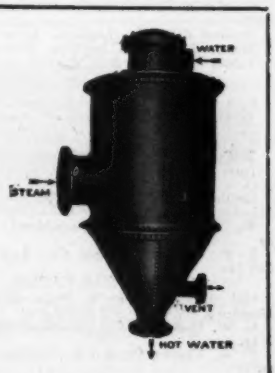
Easy to install and operate. Complete information on request.



SCHUTTE & KOERTING Co.

1255 N. 12th STREET PHILADELPHIA, PA.

Imports of Paper and Paper Stock

NEW YORK, BOSTON, PHILADELPHIA AND OTHER PORTS

NEW YORK IMPORTS

WEEK ENDING AUGUST 18, 1928

SUMMARY

Cigarette paper	2,682 cs.
Wall paper	1 bls., 25 cs.
Paper hangings	7 bls., 8 cs.
News print	199 bls., 1,428 rolls
Printing paper	21 bls., 200 rolls, 33 cs.
Wrapping paper	6 cs.
Packing paper	200 bls., 4 pkgs., 10 cs.
Tissue paper	84 cs.
Pergamyn paper	36 cs.
Baryta coated paper	80 cs.
Surface coated paper	244 cs.
Gold coated paper	6 cs.
Photo paper	10 cs.
Aluminum lined paper	3 cs.
Stencil paper and ink	48 cs.
Decalcomania paper	89 cs.
Drawing paper	12 cs.
Filter paper	5 bls., 13 cs.
Note paper	1 cs.
Writing paper	19 cs.
Colored paper	52 cs.
Parchment paper	6 bls.
Cover paper	5 cs.
Litho paper	23 cs.
Straw board	363 rolls
Miscellaneous paper	1,112 bls., 6,996 rolls, 333 cs.

CIGARETTE PAPER

Standard Products Corp., Ile de France, Havre, 80 cs.
De Manduit Paper Corp., Indep. Hall, St. Nazaire, 1,171 cs.
American Tobacco Co., Indep. Hall, Bordeaux, 1,431 cs.

WALL PAPER

F. J. Emmerich, Baltic, Liverpool, 2 cs.
F. J. Emmerich, Deutschland, Hamburg, 6 cs.
Phoenix Shipping Co., Deutschland, Hamburg, 4 cs.
A. C. Dodman, Jr., Inc., Lapland, Antwerp, 5 cs.
G. J. Hunken Co., Seydlitz, Bremen, 6 cs.
F. A. Binder, Seydlitz, Bremen, 1 bls.
Universal Car Loading Co., G. Washington, Bremen, 2 cs.

PAPER HANGINGS

A. C. Dodman, Jr., Inc., Baltic, Liverpool, 4 bls.
W. H. S. Lloyd & Co., American Farmer, London, 3 bls., 2 cs.
Whiting & Patterson Co., Inc., Minnesota, London, 6 cs.

NEWS PRINT

Perkins Goodwin & Co., Muenchen, Bremen, 239 rolls.
Parsons & Whittemore, Inc., Muenchen, Bremen, 440 rolls.
Guaranty Trust Co., Stockholm, Gothenburg, 174 rolls.
A. S. Zabriskie, Seydlitz, Bremen, 92 rolls.
Parsons & Whittemore, Inc., Seydlitz, Bremen, 398 rolls.
Walker Goulard Plehn Co., Seydlitz, Bremen, 199 bls.
A. S. Zabriskie, G. Washington, Bremen, 85 rolls.

PRINTING PAPER

Judson Freight F'd'g Co., Muenchen, Bremen, 21 bls.
Perkins, Goodwin & Co., Deutschland, Hamburg, 148 rolls.
Keuffel & Esser Co., Deutschland, Hamburg, 52 rolls.
Hudson F'd'g Co., Lapland, Antwerp, 17 cs.
Martin & Bechtold, Seydlitz, Bremen, 12 cs.
Tamm & Co., Seydlitz, Bremen, 4 cs.

WRAPPING PAPER

Coetry & Wachenheuz, Lapland, Antwerp, 2 cs.
E. Dietzgen & Co., Lapland, Antwerp, 4 cs.

PACKING PAPER

F. C. Strype, Volendam, Rotterdam, 4 pkgs.
International F'd'g Co., Volendam, Rotterdam, 9 cs.
Haule Wax Paper Manfg. Co., Deutschland, Hamburg, 41 cs.
M. Harrison Co., Deutschland, Hamburg, 50 cs.
J. P. Heffernan Paper Co., Lapland, Antwerp, 200 bls.

TISSUE PAPER

Old Master Paper & Pulp Co., Deutschland, Hamburg, 66 cs.
G. W. Sheldon & Co., American Farmer, London, 3 cs.
F. B. Vandegrift & Co., Scythia, Liverpool, 15 cs.

PERGAMYN PAPER

Central Union Trust Co., Deutschland, Hamburg, 36 cs.

BARYTA COATED PAPER

Globe Shipping Co., Muenchen, Bremen, 30 cs.
J. H. Schroeder Banking Corp., Muenchen, Bremen, 25 cs.
J. H. Schroeder Banking Corp., Seydlitz, Bremen, 25 cs.

SURFACE COATED PAPER

Whiting & Patterson Co., Inc., Deutschland, Hamburg, 10 cs.
Globe Shipping Co., Deutschland, Hamburg, 29 cs.
Phoenix Shipping Co., Deutschland, Hamburg, 1 cs.
P. C. Zuhlke, Lapland, Antwerp, 133 cs.
Gevaert Co. of America, Lapland, Antwerp, 71 cs.

GOLD COATED PAPER

F. Murray Hill Co., G. Washington, Bremen, 6 cs.

PHOTO PAPER

Medo Photo Supply Co., Minnesota, London, 1 cs.
J. H. Schroeder Banking Corp., G. Washington, Bremen, 9 cs.

ALUMINUM LINED PAPER

Standard Underground Cable Co., Deutschland, Hamburg, 3 cs.

STENCIL PAPER AND INK

Arlac Dry Stencil Co., Deutschland, Hamburg, 48 cs.

DECALCOMANIA PAPER

B. F. Drakenfeld & Co., Baltic, Liverpool, 17 cs. (duplex); 11 cs. (simplex).
L. A. Consmiller, Muenchen, Bremen, 14 cs.
C. W. Sellers, Muenchen, Bremen, 8 cs.
C. W. Sellers, Duetschland, Hamburg, 2 cs.
C. W. Sellers, G. Washington, Bremen, 10 cs.
L. A. Consmiller, G. Washington, Bremen, 27 cs.

DRAWING PAPER

H. Reeve Angel & Co., Inc., Carmania, London, 4 cs.
Keuffel & Esser Co., Deutschland, Hamburg, 8 cs.

FILTER PAPER

H. Reeve Angel & Co., Inc., Carmania, London, 13 cs.
A. Giese & Son, Deutschland, Hamburg, 5 bls.

NOTE PAPER

H. Reeve Angel & Co., Inc., Carmania, London, 1 cs.

WRITING PAPER

Guibout freres, Ile de France, Havre, 3 cs.
J. E. Bernard & Co., Homeric, Southampton, 6 cs.
Quality Art Novelty Co., Indep. Hall, Bordeaux, 10 cs.

COLORED PAPER

Phoenix Shipping Co., G. Washington, Bremen, 14 cs.
S. Gilbert, G. Washington, Bremen, 1 cs.
S. Gilbert, Muenchen, Bremen, 15 cs.
Arrow Manfg. Co., Deutschland, Hamburg, 4 cs.
C. W. Williams & Co., Lapland, Antwerp, 15 cs.
S. Gilbert, Seydlitz, Bremen, 3 cs.

PARCHMENT PAPER

Walker Goulard Plehn Co., Deutschland, Hamburg, 6 bls.

COVER PAPER

International F'd'g Co., Deutschland, Hamburg, 5 cs.

LITHO PAPER

Fuchs & Lang Manfg. Co., Asuka Maru, Hong Kong, 13 cs.
B. Meinbers, Asuka Maru, Hong Kong, 10 cs.

STRAW BOARD

A. Vuyk, Volendam, Rotterdam, 228 rolls.
State Bank & Trust Co., Volendam, Rotterdam, 135 rolls.

MISCELLANEOUS PAPER

The Borregaard Co., Inc., Argosy, Gothenburg, 2,030 rolls, 6 bls.
M. M. Cohen, Argosy, Gothenburg, 78 bls.
Hensel B. & Lorbacher, Volendam, Rotterdam, 15 cs.
J. H. Schroeder Banking Corp., Volendam, Rotterdam, 39 cs.
Wilkinson Bros. & Co., Inc., Volendam, Rotterdam, 10 cs.
Steffens Jones Co., Asuka Maru, Kobe, 9 cs.
Keller Dorian Paper Co., Ile de France, Havre, 18 cs.
Cheramy, Inc., Ile de France, Havre, 3 cs.
British American Tobacco Co., Ile de France, Havre, 127 cs.
G. W. Sheldon & Co., Ile de France, Havre, 50 cs.
H. D. Catty & Co., Ile de France, Havre, 18 cs.
C. R. Spence & Co., Ile de France, Havre, 7 cs.
C. K. MacAlpine & Co., Stockholm, Gothenburg, 144 bls.
Hensel B. & Lorbacher, Seydlitz, Bremen, 7 cs.
To order, Seydlitz, Bremen, 4,966 rolls, 884 bls.
Whitefield Paper Works, Kuma Maru, Kobe, 30 cs.

RAGS, BAGGING, ETC.

Guaranty Trust Co., Baltic, Liverpool, 18 bls. rags.
State Bank & Trust Co., Baltic, Liverpool, 16 bls. rags.
Leigh Textile Co., Cabo Mayor, Barcelona, 180 bls. rags.
Leigh Textile Co., Volendam, Rotterdam, 100 bls. cotton waste.
J. Rosenberg, Volendam, Rotterdam, 156 bls. bagging.
P. Berlowitz, Volendam, Rotterdam, 110 bls. rags; 80 bls. bagging.
Castle & Overton, Inc., Volendam, Rotterdam, 34 bls. bagging.
Salomon Bros. & Co., Bankdale, Alexandria, 55 bls. rags.
The Barrett Co., Coelleda, Glasgow, 63 bls. rags.
A. W. Fenton, Inc., Coelleda, Glasgow, 120 bls. rags.
H. G. Lichtenstein, Coelleda, Glasgow, 288 bls. rags.
Equitable Trust Co., Muenchen, Bremen, 50 bls. rags.
American Exchange Irving Trust Co., Muenchen, Bremen, 100 bls. cotton waste.
Bank of The Manhattan Co., Muenchen, Bremen, 100 bls. rags.
National City Bank, Muenchen, Bremen, 84 bls. jute waste.
Anglo South American Trust Co., Muenchen, Bremen, 157 bls. bagging.
Kidder Peabody Accep. Corp., Muenchen, Bremen, 59 bls. rags.
E. J. Keller Co., Inc., Deutschland, ——, 21 bls. rags.
A. W. Fenton, Inc., Deutschland, Hamburg, 103 bls. rags.
M. Mager, Deutschland, Hamburg, 14 bls. rags.
E. J. Keller Co., Inc., Ryufuku Maru, ——, 335 bls. rags.
A. H. Searle, Inc., Caledonia, Glasgow, 216 bls. paper stock.
Castle & Overton, Inc., Caledonia, Glasgow, 54 bls. bagging.
Brown Bros. & Co., Caledonia, Glasgow, 30 bls. rags.
Darmstadt, Scott & Courtney, Asuka Maru, Kobe, 223 bls. rags.
American Exchange Irving Trust Co., Mercer, Antwerp, 36 bls. rags.
Leigh Textile Co., Artigas, Manchester, 90 bls. cotton waste.
E. Butterworth & Co., Inc., Artigas, Manchester, 111 bls. bagging; 88 bls. rags.
Castle & Overton, Inc., Artigas, Manchester, 56 bls. bagging.
R. F. Downing & Co., Artigas, Manchester, 27 bls. paper stock.
Interstate Trust Co., Seydlitz, Bremen, 257 bls. rags.
Castle & Overton, Inc., Vincent, Havre, 106 bls. rags.
Salomon Bros. & Co., Vincent, Havre, 72 bls. rags.
The Barrett Co., Vincent, Dunkirk, 159 bls. rags.
A. W. Fenton, Inc., Vincent, Dunkirk, 5 bls. rags.
American Over-Ocean Corp., Kuma Maru, Kobe, 70 bls. rags.
Bank of The Manhattan Co., G. Washington, Bremen, 128 bls. bagging.
W. Schall & Co., G. Washington, Bremen, 199 bls. bagging.
E. J. Keller Co., Inc., Indep. Hall, St. Nazaire, 108 bls. rags.
Castle & Overton, Inc., Indep. Hall, Bordeaux, 415 bls. rags; 195 bls. bagging.
Robert Blank, Indep. Hall, Bordeaux, 102 bls. rags.
Guaranty Trust Co., C. Gerolimich, Palermo, 305 bls. rags.
Banco Com'l Italiane Trust Co., C. Gerolimich, Palermo, 201 bls. bagging.
E. J. Keller Co., Inc., Western Ally, ——, 36 bls. rags.
Castle & Overton, Inc., Suevier, Antwerp, 108 bls. rags.
Castle & Overton, Inc., Western Ally, Rotterdam, 220 bls. rags.
Castle & Overton, Inc., Marengo, Antwerp, 101 bls. waste.

(*Continued on page 64*)

BOLTON QUALITY

JOHN W. BOLTON & SONS, INC.

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The only firm making KNIVES for every machine from wood pile to finishing room.

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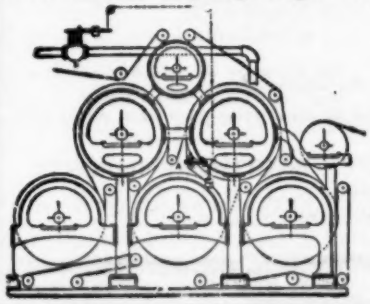
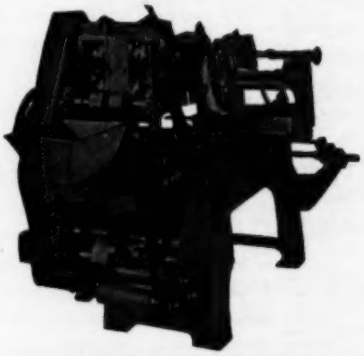
YOU'LL MAKE NO MISTAKE IN ACCEPTING IT



Pickles Drying Regulator

will do everything we claim for it and more. The test costs you nothing until you are satisfied. Many mills tried one and now have every machine equipped. Write for list of users and other information.

W. F. PICKLES **Buckland, Conn.**



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Hydraulic Presses and Pumps

Successors to the Granger Foundry & Machine Co.

The Textile-Finishing Machinery Company

PROVIDENCE, R. I.

Imports of Paper and Paper Stock

(*Continued from page 62*)

Castle & Overton, Inc., Chicago City, Bristol, 76 bls. rags.

OLD ROPE

N. E. Berzen, Cabo Mayor, Malaga, 636 bls.
N. E. Berzen, Cabo Mayor, Barcelona, 73 bls.
W. Steck & Co., Volendam, Rotterdam, 73 coils.
Brown Bros. & Co., Volendam, Rotterdam, 231 coils.
Darmstadt Scott & Courtney, Coelleda, Glasgow, 90 bls.
Chemical National Bank, Muenchen, Bremen, 31 coils.
American Exchange Irving Trust Co., Muenchen, Bremen, 53 coils.
Brown Bros. & Co., Deutschland, Hamburg, 49 coils.
Brown Bros. & Co., Chicago City, Bristol, 143 coils.
W. Schall & Co., Mercier, Antwerp, 221 pkgs.

CASEIN

Equitable Trust Co., Vincent, Havre, 267 bags, 20,000 ks.
American British Chemical Supplies, Inc., Vincent, Havre, 20 bags.

WOOD PULP

Bulkley Dunton & Co., Muenchen, ——, 500 bls. wood pulp.
J. Andersen & Co., Argosy, Sarpsborg, 1,380 bls. sulphite, 230 tons.
Perkins Goodwin & Co., Argosy, Obbola, 2,409 bls. sulphate, 1,219 tons.
Castle & Overton, Inc., Deutschland, Hamburg, 1,042 bls. wood pulp.
Brown Bros. & Co., Orla, Norrsundet, 5,250 bls. sulphate.
Bulkley Dunton & Co., Orla, ——, 2,350 bls. wood pulp, 470 tons.
Chemical National Bank, Orla, Iggesund, 625 bls. sulphate, 125 tons.
Price & Pierce, Ltd., Orla, Wallvik, 900 bls. sulphite, 150 tons.
Johanson Wales & Sparre, Inc., Stockholm, Gothenburg, 449 bls. kraft pulp.
E. M. Sergeant & Co., Stockholm, Gothenburg, 449 bls. kraft pulp.
E. J. Keller Co., Inc., Victoria Maru, ——, 356 bls. wood pulp, 55 tons.
Bulkley Dunton & Co., Fredensbro, ——, 8,781 bls. wood pulp, 1,585 tons.
A. P. W. Paper Co. (Albany, N. Y.), Dago, Sheet Harbor, 1,479 tons wood pulp.

WOOD PULP BOARDS

International F'd'g Co., Deutschland, Hamburg, 57 bls., 8 tons.
Hensel B. & Lorbacher, G. Washington, Bremen, 80 bls., 10 tons.
Lagerloef Trading Co., G. Washington, Bremen, 237 bls., 32 tons.

BOSTON IMPORTS

WEEK ENDING AUGUST 18, 1928

Pagel Horton & Co., Inc., Orla, Norrsundet, 600 bls. sulphite.
Price & Pierce, Ltd., Orla, Norrsundet, 4,950 bls. sulphite.
Kalbfleisch Corp., Brazillian Prince, B. Aires, 1,254 bags casein, 165,477 ks.
Bulkley Dunton & Co., City of Alton, ——, 500 bls. wood pulp.
E. J. Keller Co., Inc., Davisian, ——, 69 bls. bagging.

NEW ORLEANS IMPORTS

WEEK ENDING AUGUST 18, 1928

E. J. Keller Co., Inc., F. Luckenbach, ——, 400 bls. bagging.

NORFOLK IMPORTS

WEEK ENDING AUGUST 18, 1928

The Borregaard Co., Inc., Argosy, Hurum, 1,998 bls. sulphate, 333 tons.

PHILADELPHIA IMPORTS.

WEEK ENDING AUGUST 18, 1928

J. Andersen & Co., Argosy, Sarpsborg, 150 bls. sulphite, 25 tons.
Union Bank & Trust Co., Chicago City, Bristol, 69 bls. rags.
Bank of The Manhattan Co., Chicago City, Bristol, 141 bls. rags.
Leipheimer Missimer Co., Asuka Maru, Kobe, 95 bls. rags.
Castle & Overton, Inc., Vincent, Havre, 474 bls. rags.
J. M. Jaffe, Vincent, Havre, 8 bls. rags.
Katzenstein & Keene, Inc., Vincent, Havre, 191 bls. rags; 45 bls. new cuttings.
Mathes & Co., Vincent, Havre, 49 bls. rags.
A. Hurst & Co., Vincent, Havre, 25 bls. rags.
National Wiping Cloth Co., Vincent, Dunkirk, 55 bls. rags.
Equitable Trust Co., Vincent, Dunkirk, 69 bls. rags.
G. W. Millar & Co., Vincent, Dunkirk, 80 bls. rags.
Robert Blank, Vincent, Dunkirk, 75 bls. rags.
V. Galaup, Vincent, Dunkirk, 371 bls. rags.
J. A. Steer & Co., Vincent, Dunkirk, 60 bls. rags.
E. J. Keller Co., Inc., Vincent, ——, 69 bls. rags.
Katzenstein & Keene, Inc., Indep. Hall, St. Nazaire, 56 bls. rags.
G. W. Millar & Co., Indep. Hall, St. Nazaire, 153 bls. rags.
National City Bank, Indep. Hall, St. Nazaire, 141 bls. rags.
P. Berlowitz, Indep. Hall., St. Nazaire, 106 bls. rags.
E. J. Keller Co., Inc., Indep. Hall, ——, 477 bls. rags.
V. Galaup, Indep. Hall, St. Nazaire, 179 bls. rags.
Fidelity Trust Co., Indep. Hall, Bordeaux, 309 bls. rags.
Castle & Overton, Inc., Indep. Hall, Bordeaux, 241 bls. rags.
Castle & Overton, Inc., Quaker City, England, 226 bls. rags.
Castle & Overton, Inc., Hannover, Germany, 156 bls. rags.
Castle & Overton, Inc., Melmore Head, Antwerp, 205 bls. rags.
Castle & Overton, Inc., Coahoma County, Antwerp, 54 bls. rags.
Castle & Overton, Inc., Turpin, Denmark, 144 bls. rags.
Castle & Overton, Inc., Hudson, France, 1,072 bls. rags.
Castle & Overton, Inc., Sacandaga, Antwerp, 325 bls. rags.
Castle & Overton, Valemore, England, 65 bls. waste.
Castle & Overton, Inc., Mercer, Holland, 169 bls. rags.
Castle & Overton, Inc., Valemore, England, 108 bls. rags.
Castle & Overton, Inc., West Imboden, So. America, 103 bls. rags.
Castle & Overton, Haveland, Germany, 51 bls. rags.
Bulkley Dunton & Co., Hannover, ——, 500 bls. wood pulp.
Bulkley Dunton & Co., Iserholm, ——, 475 bls. wood pulp.
E. J. Keller Co., Inc., Innoko, ——, 497 bls. rags.
E. J. Keller Co., Inc., Iserholm, ——, 352 bls. wood pulp; 187 bls. rags.
E. J. Keller Co., Inc., Melmore Head, ——, 106 bls. rags.
E. J. Keller Co., Inc., Vittoria, Emanuele, ——, 51 bls. rags.
E. J. Keller Co., Inc., Cabo Mayor, ——, 280 bls. rags.

PORTLAND IMPORTS

WEEK ENDING AUGUST 18, 1928

The Borregaard Co., Inc., Argosy, Hurum, 3,450 bls. sulphate, 575 tons.
Waterfalls Paper Mills, Argosy, Gothenburg, 5,500 bls. dry pulp, 1,035 tons; 74 rolls paper.

BALTIMORE IMPORTS.

WEEK ENDING AUGUST 18, 1928

G. M. Graves Co., Coelleda, Glasgow, 133 bls. rags.
J. B. Woodruff, Coelleda, Glasgow, 37 bls. rags.
G. W. Millar & Co., Coelleda, Glasgow, 33 bls. waste paper.
J. Andersen & Co., Argosy, Sarpsborg, 2,772 bls. sulphite, 462 tons.
Pagel Horton & Co., Inc., Argosy, Hornefors, 5,550 bls. sulphite, 939 tons.
Pagel Horton & Co., Inc., Argosy, Husum, 3,600 bls. sulphate, 609 tons.
The Borregaard Co., Inc., Argosy, Gothenburg, 375 bls. dry pulp, 76 tons.
Brown Bros. & Co., Orla, Norrsundet, 3,000 bls. sulphite.
Bulkley Dunton & Co., Orla, ——, 350 bls. sulphite, 70 tons.
M. Gotteman & Co., Inc., Orla, Iggesund, 1,525 bls. sulphite, 305 tons.
Price & Pierce, Ltd., Orla, Wallvik, 8,250 bls. sulphite, 1,375 tons; 375 bls. wood pulp, 75 tons.
Congoleum Nairn Co., Indep. Hall, St. Nazaire, 633 bls. rags.
R. J. Reynolds Tobacco Co., Indep. Hall, St. Nazaire, 1,280 cases cigarette paper.
Congoleum Nairn Co., Indep. Hall, Bordeaux, 1,171 bls. rags.
Wood pulp Service Corp., Tampa, Oslo, 800 bls. wood pulp.
Woodpulp Service Corp., Hannover, Hamburg, 2,250 bls. wood pulp.
Bulkley Dunton & Co., Harburg, ——, 125 bls. wood pulp.
Bulkley Dunton & Co., Yokohama, ——, 650 bls. wood pulp.
Castle & Overton, Inc., Hudson, France, 187 bls. rags.

Case Board Co. Burned

ANDOVER, Conn., August 20, 1928—Fire which visited the plant of the Case Board company August 15, destroyed stock and machinery to the value of $70,000.

The plant employs 31 hands and is the only industry in the community. At the time that the blaze was discovered the night shift was quitting and the day shift coming to work.

All hands joined in attempts to douse the blaze, but the flames quicklytraveled from one pile of stock to another and ever licked outside the windows and destroyed several bales of stock which rested against the buildings.

Goes With Miner Laboratories

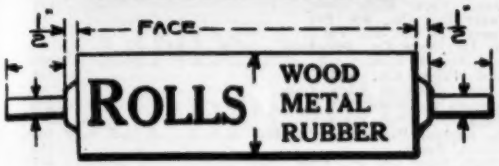
[FROM OUR REGULAR CORRESPONDENT]

CHICAGO, August 20, 1928—G. H. Sayler has resigned from the chemical research department of the Dennison Manufacturing Company, Framingham, Mass., to become connected with the Miner Laboratories, Inc., Chicago.

C. E. Brandt New Hammermill Agents

ERIE, Pa., August 20, 1928—The Hammermill Paper Company has announced the appointment of C. E. Brandt & Company, Division of Beecher Peck & Lewis, Flint, Mich., as new Hammermill agents.

RODNEY HUNT



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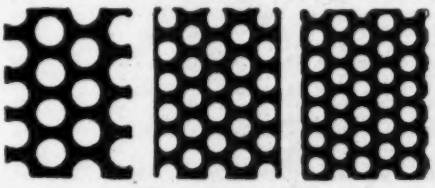
PERFORATED METALS



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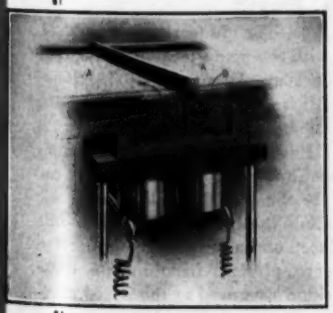

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Electrical Specialists. *Established 1885*

Paper Mill Stocks and Bonds

Quoted by Taylor & White, 45 Wall street, New York City, to whom all inquiry for quotations on these or any other Securities is referred.

Abitibi Power & Paper 5s, 1943	90	91
Abitibi Power & Paper 6s, serially to 1934	100	102
American Writing Paper 6s, 1947	81	87
Bastrop Pulp & Paper 6½s, 1940	103	105½
Bedford Pulp & Paper 6½s, 1942	97	100
Belgo-Canadian Paper 6s, 1943	100	103
British-Columbia Pulp & Paper 6s, 1950	89	92
Brown Paper Mills Serial 6s, 1941	97	100
Brown Company 5½s, 1946	98	101
Bryant Paper 6s, 1942	98	101½
Canadian Paper Board 7s, 1937	97	99½
Cape Breton Pulp & Paper 6s, 1932	103	...
Celotex Company 6s, 1929	95	99
Celotex Company 6½s, 1939	100	102
Celotex Company of Chicago Debenture 6s, 1936	95	98
Central Paper Company Serial 6½s, 1942	86	89
Central Paper 7s, 1934	78	...
Champion Coated Paper Serial 6½s, 1934	100	...
Champion Coated Fibre Notes 6s, 1941	100	102
Champion Fibre Notes 6s, 1941	100	102
Champion Fibre Notes 8s, 1930	95	...
Champion Paper Corp 6s, 1945	95	98
Container Corp of America Debenture 6s, 1936, ex-warrants	101	104
Continental Paper Products 6½s, 1943	90	99
Cornell Wood Products 7½s, 1937	103	...
Crown Willamette 6s, 1951	101	102
Dells Paper & Pulp Serial 6s, 1938	95	98
Dixon Board Mills Serial 6s, 1942	80	...
Donnaconna Paper 5½s, 1948	95	98
Eastern Manufacturing Co. 7s, 1938	97	100
Escanaba Paper Serial 6s, 1939	98	100
Escanaba Paper 6½s, 1935	96	99
Filer Fibre Serial 7s, 1935	90	95
Fort Orange Paper 7s, 1942	101	...
Fort William Paper 6s, 1946	100	104
Fraser Company 6s, 1950	103	105
Hammermill Paper Serial 6s, 1939	100	...
Hawley Pulp & Lumber 6s, 1946	96	...
Hawthorne Paper Company 6s, 1937	80	...
Hoberg Paper & Fibre 7s, 1937	94	97
Industrial Fibre Corp. Debenture 8s, 1933	100	...
International Paper 6s, 1955	102	103
International Paper 5s, 1947	98	100
Itasca Paper & Prairie River Power Serial 5½s, 1938	99½	...
Itasca Paper & Prairie River Power Serial 6s, 1938	99	...
Jessup & Moore First 6s, 1945	83	90
Kalamazoo Vegetable Parchment 6s, 1938	99	101
Lake Superior Paper 6s, 1941	105	108
Marathon Paper Mills Serial 5½s, 1942	99	101
Marinette & Menominee 7½s, 1936	103	105
Mead Pulp & Paper 5% Notes Serially, 1937	95	100
Mead Fibre 7s, 1937	97	101
Menosha Printing & Carton 6½s, 1939	99½	...
Minnesota Ontario Paper Serial 6s, 1945	97½	100
Murray Bay Paper Serial 6½s, 1947	102	105
Munissing Paper Serial 6s, 1936	98	...
Nekoosa Edwards Paper 6s, 1928-42	96	...
Ontario Pulp & Paper 6s, 1931	108½	110½
Orono Pulp & Paper 6s, 1943	99	...
Orono Pulp & Paper 5s, 1941	96½	...
Oswegatchie Paper Serial 6s, 1932	95	100
Oswego Falls Corp. 6s, 1941	99	102
Parker-Young Company 6½s, 1944	98	100
Paterson Parchment Paper 6s, 1938	101	103
Penobscot Chemical Fibre 6s, 1942	102	105
Port Alfred Pulp & Paper 5½s, 1947	98	100
Price Brothers 6s, 1943	105	...
Provincial Paper 5½s, 1947	98½	...
Queen City Paper 7s, 1933	98	...
River Raisin Paper 6s, 1936	98	100
Riordan Pulp & Paper 6s, 1942	102	104
Rolland Paper 6s, 1937	99	101
St. Croix Paper Serial 5s, 1937	99	...
St. Helen Pulp & Paper 6½s, 1931	99	102
St. Maurice Valley Corp. 6s, 1945	101	104
St. Maurice Valley Corp 5½s, 1947	98½	100½
St. Regis Paper of Canada 6s, 1931	100	101½
St. Regis Paper of Canada 6½s, 1934	100	100
Smith (Howard) Paper Mills 7s, 1941	104	106
Spanish River Pulp & Japer 6s, 1931	108	110
Stevens-Thompson Paper 6s, 1942	94	96
Taggart Brothers 6s, 1944	95	100
Tait Paper & Color Industries 6s, 1934	88	92
Ticonderoga Pulp & Paper 5s, 1930	94	...
Ticonderoga Pulp & Paper 6s, 1940	100	102
Tonahawk Kraft Paper 6s, 1938	98	...
Tonahawk Pulp Paper 7s, 1932	99	...
Tonawanda Paper 5½s, Series 1941	99	102
Union Bag & Paper Power 6s, 1932	98	100
United Wall Paper Factories 6s, 1947	96	99
Warren (S. D.) Company 6s, 1945	103	105
Watab Paper 6½s, 1942	101	103½
Waterway Paper Products 6s, 1931	100	101½
Wayagamack Pulp & Paper 6s, 1951	103	105
Westfield River Paper Serial 7s, 1943	89	93
Whitmer-Parson Pulp & Lumber 8s, 1938	20	25
Whitaker Paper 7s, 1942	108	110

STOCKS	BID	ASKED
American Box Board, Pfd.	9¼	10¼
American Box Board, Com.	9¼	10¼
Am. Tissue Mills, 7% Pfd.	90	93
British Columbia P. & P Pfd.	65	75
Brompton Pulp & Paper, 8% Pfd.	100	...
Champion Fibre, 7% Pfd.	108	110
Diem & Wing, 7% Com. Pfd.	92	97
Eastern Mfg. Co. 1st Pfd.	55	...
Great Northern Paper, Com.	75	78
Hammermill Paper, new 6% Pfd.	100	...
Hinde & Dauch, Com.	125	None Off.
Hinde & Dauch, 6% Pfd.	102	None Off.
Holyoke Card & Paper	160	None Off.
Marathon Paper Mills, Com.	150	...
Midwest Box Co., 8% Pfd.	98	102
Midwest Box Co., 6% Pfd.	95	99
Louis De Jongo Co., 7% Pfd.	94	97
Oxford Papers, Com.	195	...
Oxford Paper Co., Pfd.	108	111
Penobscot Chemical Fibre, Com.	80	...
Richardson Co., Com.	170	...
Rubberoid	95	101
Sabin Robbins Paper Co., 7% Pfd.	105	110
St. Croix Paper	155	...
St. Regis Paper Co., 7% Cum. Pfd.	105	108
Westfield River Paper Co., 1st Pfd.	Wanted	None Off.
West Virginia Pulp and Paper Company	55	57
West Virginia Pulp and Paper, Pfd.	100	103
Whittaker Paper, 7% Cum. Pfd.	105	None Off.

May Reopen Chester Paper Co. Plant

HUNTINGTON, Mass., August 21, 1928.—A meeting of the citizens of the town was held Wednesday night at the town hall with reference to the possible opening up of the Chester Paper Company plant. M. O. Chamberlin, chairman of the Board of Trade, presided.

Officials of the American Industrial Company gave an outline of their plans for reopening the mill provided the townspeople were willing to do their share towards financing the proposition. If the people would show a disposition to invest, stock would be sold. J. Oldham was the principal speaker and has been connected with paper mills for 25 years. His specialty is to take old mills, and with the help of townspeople to get them running and on a paying basis. A further meeting will be held Friday night.

The plan includes the putting in of a concrete dam to replace the one broken. The mill is obtainable at a low figure and the officials stated that the initial payroll would probably be about $1,500 a week.

The Chester Paper Company is a division of the American Writing Paper Company and was discontinued a year or two ago. Since that time a dam was washed away by floodwater. It has one 72 inch Fourdrinier and made fine writing paper and wedding paper with a capacity of about three tons a day.

Concern About Straw Crop

DAYTON, Ohio, August 20, 1928.—Straw paper manufacturers, like the farmers, are interested, and not a little concerned, over the seed wheat problem confronting the growers. Many are asking where good seed may be obtained as this year's crop has been insufficient for the purpose.

The wheat crop, consequently the straw crop, this year promises to be only 25 per cent of the last five-year average, or 8,501,000 bushels, according to the U. S. Government forecast. This is the smallest crop since 1901.

L. E. Thatcher, associate agronomist at the Ohio Experiment Station, states that if the seed wheat of the hard Western type is introduced to any extent the Ohio market for soft red winter wheat will be seriously disturbed. The seed requirements of Ohio growers is approximately 4,500,000 bushels.

Ralph M. Smyth

BOSTON, Mass., August 20, 1928.—The funeral of Ralph M. Smyth, who had been associated with the firm of Stone & Forsyth, Boston, for 38 years, was held Tuesday, August 14, at the chapel at Woodlawn Cemetery, Everett, Mass., with representatives of the firm attending. Mr. Smyth, who died August 12, was born in East Boston, 58 years ago, the son of Edward E. and Mary Williams Smyth. He was a deacon of the Church of the New Jerusalem, Boston, and was a member of the Boston City Club, the Ionic Club of Swampscott, the Bryant Club, the Eastern Star, the White Shrine, and was a 32nd degree Mason and a member of the Boston Lodge of Elks. Delegations were present from among these orders and clubs. The Masonic ritual was used at the burial service. A widow and two nieces, Miss Ruth and Miss Hester Adams, of Brookline, are living.

For reliable running and average long life

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We make them for the largest and fastest machines.

Cylinder Wires All Sizes

The Lindsay Wire Weaving Co.

Collinwood Sta. CLEVELAND, OHIO

Prompt deliveries made from stocks in
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Fishing *and* Good Dyestuffs

The experienced fisherman knows where to make his casts—so gets good results. Experienced buyers of dyestuffs are equally wise — they come to Heller & Merz.

Heller & Merz has cooperated with dyestuff users for over a half a century. That is a significant record.

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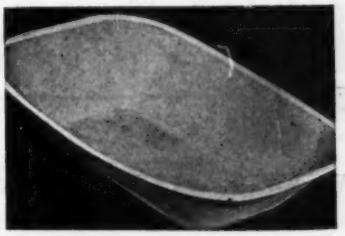

of the increased market for Paprus Butter Dishes. These dishes are absolutely waterproof—hold their shape like wood—sell for less than paper! They are moulded from pulp in one piece. No folds—no staples. White, sanitary, attractive. More and more dealers are using them. Let them build business for you.

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Ferguson ENGINEERS

New York Market Review

Office of the PAPER TRADE JOURNAL,
Wednesday, August 22, 1928.

Trading in the local paper market during the past week was mostly along routine lines. The volume of inquiries around for future business is satisfactory and the outlook for the closing months of the year is decidedly promising. Quotations in practically all sections of the paper industry remain steady and unchanged and reports of shading are infrequent.

The news print market is exhibiting a fairly strong undertone for the time of the year. Contract supplies are moving into consumption at an excellent pace. Prices are generally holding to schedule but generous concessions are still being made on contract orders booked for the forthcoming year.

Some improvement has been noticed in the paper board market. Demand is more active and prices are firmer. News and chip have advanced approximately $2.50 per ton, The position of the fine paper market is sound and tissues are moving in good volume. The coarse paper market is steady. Wrapping paper and summer specialties are in excellent request.

Mechanical Pulp

While the demand for ground wood at present is light, contract withdrawals continue to go forward at a normal pace. Although production of both imported and domestic mechanical pulp has been curtailed somewhat, offerings are sufficient to take care of current needs. Prices are generally holding to previously quoted levels.

Chemical Pulp

Steadiness prevails in the chemical pulp market. Demand for both imported and domestic grades is more active. The higher grades of chemical pulp are in particularly good request and offerings are decidedly limited. Prices are holding to schedule, without difficulty, and there is not much talk of concessions around.

Old Rope and Bagging

Both imported and domestic old rope are in good request and quotations on the various grades are steady to firm. The paper mills are beginning to evince more interest in bagging. Roofing bagging is quite active, while scrap bagging and gunny scrap are in excellent demand. Prices are holding to schedule, in most instances.

Rags

The domestic rag market is in a sound position. Demand for cotton cuttings is more active. The various grades of roofing rags are in steady request. Prices are generally holding to previously quoted levels. No radical changes were reported in the foreign rag market. Imported roofing rags are exhibiting strength but demand for other grades is quiet.

Waste Paper

Inquiries for paper stock are being received in increased volume and the condition of the market is improving somewhat. Collections are reported to be well up to average. Quotations are firmer. Container manilas are now selling at from .65 to .70. No. 1 white news is offered at from 1.55 to 1.65. Strictly folded news is now quoted at from .60 to .70 and No. 1 mixed paper at from .50 to .55.

Twine

Seasonal conditions continue to prevail in the local twine market. While the amount of business being transacted at this time is small, it is believed that this trend is only temporary, and a general revival of activity is anticipated after Labor Day. Prices of the various grades continue steady and unaltered.

W. F. Whiting Appointed Secretary of Commerce

SUPERIOR, Wis., August 21, 1928.—President Coolidge today accepted the resignation of Herbert Hoover as Secretary of Commerce and appointed his successor. The new member of the Coolidge Cabinet is William F. Whiting, head of the Whiting Paper Company, of Holyoke, Mass.

Arriving here this morning, Mr. Whiting was sworn in, this ceremony taking place in the executive offices. Although in Massachusetts politics and a friend of long standing of President Coolidge he has never before held public office.

Mr. Whiting, although never having played a prominent part in the activities of the Department of Commerce, nevertheless is familiar in a general way with its work, having over a period of several years co-operated with its officials in their efforts to bring about simplification in the paper industry, in which he is a well-known figure.

Mr. Whiting was born in Holyoke July 20, 1864, the eldest son of the late William and Anna Maria (Fairfield) Whiting. He attended the public schools, was graduated from Williston Seminary in 1882 and from Amherst College four years later.

The Whiting family is an old New England one. The father of the Secretary of Commerce started manufacturing fine writing paper in 1865. Only a few months ago Mr. Whiting purchased the Lyman Mills, a large cotton mill in Holyoke that had been liquidated and is remaking it into a modern paper mill.

Mr. and Mrs. Whiting have three sons, William, Edward C. and Fairfield, all of whom are connected with the Whiting Paper Company, and one daughter, Mrs. Neil Chapin of Springfield.

Behr-Manning Corp. Starts Construction

Following the recent consolidation of the Manning Abrasive Company of Troy and the Herman Behr Company of Brooklyn, manufacturers of abrasive papers and cloth, and the change of name to the Behr-Manning Corporation, it has been definitely decided to discontinue the present Brooklyn plant and to consolidate all manufacturing at the Troy works.

A commission has been given to the Morton C. Tuttle Company of Boston to design and construct several new buildings, which when completed will practically double the capacity of the present Manning plant. The structures include a machine shop, storehouse, four story manufacturing building, five story grading building, power house, with connecting buildings, platforms, etc., as well as a railroad siding 150 feet long to serve the new structures. Construction has already been started and it is expected will be ready for moving in machinery from Brooklyn by the end of the year.

The new corporation continues to be affiliated with Manning Paper Company of Troy.

BROWN COMPANY'S ALPHA GRADES

of Purified Cellulose Fibre representing some of the valuable results of our many years of research in cellulose chemistry.

SUPER ALPHA

for strength in Tear, Fold and Mullen. Super Alpha equals the higher grades of rags in the manufacture of fine papers.

EASY-BEATING ALPHA

This is a grade developed for mills of limited beating capacity. While not giving results equal to Super Alpha, it produces wonderful paper on short beating.

REGULAR ALPHA

This is a grade midway between Super and Easy-Beating.

Use ALPHA for Quality

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CINCINNATI	Traction Building
CLEVELAND	Guardian Building
DALLAS, TEXAS	Magnolia Building
DENVER	444 Seventeenth Street
DETROIT	Ford Building
HOUSTON, TEXAS	Electric Building
LOS ANGELES	Central Building
NEW ORLEANS	344 Camp Street
PHILADELPHIA	Packard Building
PHOENIX, ARIZ.	Heard Building
PITTSBURGH	Farmers Deposit Bank Building
PORTLAND, ORE.	Failing Building
SALT LAKE CITY	Kearns Building
SAN FRANCISCO	Sheldon Building
SEATTLE	L. C. Smith Building
HONOLULU, T. H.	Castle & Cooke Building
HAVANA, CUBA	Calle de Aguiar 104
SAN JUAN, P. R.	Recinto Sur 51

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Photograph of a Centrifugal Pump Shaft badly worn by working against flax packing which did not carry sufficient lubricant to prevent friction.

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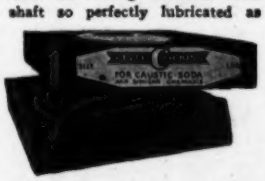
For pumps handling caustic soda and similar chemicals.

Its lubricant can be relied upon to resist the cutting action of these chemicals, and to keep the pump shaft so perfectly lubricated as to avoid friction. To prove our claims let us send you a free working sample to test under your own conditions.



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Coatesville Products of one sort or another will be found, — Boilers, Stacks, Breechings, Tanks, Digesters, Riveted Pipe, Stand Pipes, Troughs.

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The job illustrated above was entirely made by Coatesville and was shipped "riveted-up" to the Pacific Coast (Length 86'3", width 9'0", weight 154,000 lbs.)

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Miscellaneous Markets

Office of the PAPER TRADE JOURNAL,
Wednesday, August 22, 1928.

BLANC FIXE.—Demand for blanc fixe was fairly satisfactory during the past week. The contract movement was normal. Prices remain unchanged. The pulp is selling at $40 per ton, in bulk, while the powder is still offered at from 3½ cents to 3⅝ cents a pound, in barrels, at works.

BLEACHING POWDER.—Most of the business transacted in the bleaching powder market was along routine lines. Contract withdrawals continue to move at a steady pace. Prices remain unchanged. Bleaching powder is quoted at from $2.00 to $2.35 per 100 pounds, in large drums, at works, according to quantity and grade.

CASEIN.—The casein market is exhibiting a strong undertone. Offerings are rather limited and prices rule firm. Domestic casein is still quoted at from 16¼ cents to 17 cents a pound. Imported casein is selling at from 16¾ cents to 17 cents a pound, all in bags, car lot quantities.

CAUSTIC SODA.—Supplies of caustic soda are moving into consumption in excellent volume. Prices are generally holding to schedule. Solid caustic soda is quoted at from $2.90 to $2.95 per 100 pounds. The flake and the ground are selling at from $3.30 to $3.35 per 100 pounds, in large drums, at works.

CHINA CLAY.—The china clay market is in a sound position. Shipments against contract are moving in good volume. Prices remain unchanged. Imported china clay is selling at from $15 to $25 a ton, ship side. Domestic papermaking clay is quoted at from $8 to $9 a ton, at mine, and pulverized at from $10 to $12 a ton.

CHLORINE.—Contract shipments of liquid chlorine are going forward in a regular manner. Prices are holding to previously quoted levels. Chlorine is selling at 3½ cents a pound, in tanks, or multi-unit cars, at works, on contract orders. The spot quotation ranges from 3¾ cents to 4 cents a pound.

ROSIN.—The rosin market continues to fluctuate. At the naval stores, the various grades of gum rosin used in the paper mills are now selling at from $9.50 to $9.60 per 280 pounds, ex dock, in barrels. Wood rosin is still offered at from $7.50 to $8.30 per 280 pounds, at southern shipping points.

SALT CAKE.—Steadiness continues to prevail in the salt cake market. Supplies are moving into consumption in a normal manner for the season. Prices remain unchanged. Salt cake is selling at from $15 to $17 a ton, in bulk, at works. Chrome salt cake is still offered at from $14 to $15 a ton.

SODA ASH.—No radical changes were recorded in the soda ash market. Demand for this product is well up to average for the season. Prices are holding to former levels, in most instances. Contract quotations on soda ash, in car lots, at works, per 100 pounds, are as follows: in bags, $1.32½, and in barrels, $1.55.

STARCH.—Consumption of starch is satisfactory for the time of the year and contract shipments are moving in excellent volume. The recently advanced prices are being maintained. Special paper making starch is quoted at $4.22 per 100 pounds, in bags, and at $4.39 per 100 pounds, in barrels.

SULPHATE OF ALUMINA.—Manufacturers of sulphate of alumina continue to make substantial shipments. Prices remain unchanged. Commercial grades of sulphate of alumina are offered at from $1.40 to $1.55 per 100 pounds. The iron free is quoted at from $1.90 to $2.05 per 100 pounds, in bags,, at works.

SULPHUR.—Production of sulphur is being maintained in sufficient volume to cope with the prevailing demand, which is fairly persistent. Prices rule steady and unchanged. Sulphur is quoted at from $18 to $19 a ton, in bulk, at mine, on contract orders. The spot quotation is still $20 per ton.

TALC.—Conditions in the talc market are practically unchanged. The contract movement is about normal for the season. Prices generally remain unaltered. Domestic talc is quoted at from $16 to $18 a ton, in bulk, at eastern mines. Imported talc is selling at from $18 to $20 per ton, ship side.

Market Quotations

Paper

(F. o. b. Mill)

Ledgers	11.00	@38.00
Bonds	9.00	@45.00
Writings—		
Extra Superfine	14.00	@32.00
Superfine	14.00	@32.00
Tub sized	10.00	@15.00
Engine sized	8.00	@11.00
News—		
Rolls, contract	3.25	@ —
Rolls, transient	3.25	@ 3.50
Sheets	3.65	@ 3.85
Side Runs	3.00	@ 3.75
Book, Cased—		
S. & S. C.	6.35	@ 7.75
M. F.	6.25	@ 7.75
Coated and Enamel	8.00	@15.00
Lithograph	8.00	@15.00
Tissues—Per Ream—		
White No. 1	.75	@ 1.00
Anti-Tarnish	1.10	@ 1.90
Colored	1.00	@ 2.00
White No. 2	.75	@ .85
Kraft	.90	@ 1.00
Manila	.75	@ .85
Kraft—		
No. 1 Domestic	6.25	@ 6.50
No. 2 Domestic	4.25	@ 4.50
Southern	4.00	@ 4.25
Imported	6.50	@ 7.00
Manila—		
No. 1 Jute	9.00	@ 9.25
No. 2 Jute	7.75	@ 8.50
No. 1 Wood	4.75	@ 5.25
No. 2 Wood	4.00	@ 4.50
Butchers	3.75	@ 4.25
Fibre Papers—		
No. 1 Fibre	5.00	@ 5.50
No. 2 Fibre	4.75	@ 5.25
Common Bogus	2.75	@ 3.00
Screenings	3.00	@ 3.25
Card Middles	4.00	@ 5.00
Glassine—		
Bleached, basis 25 lbs.	13.00	@16.00
Bleached, basis 20 lbs.	15.00	@16.00
(Delivered New York)		
Boards—per ton—		
News	50.00	@52.50
Straw	52.50	@55.00
Chip	47.50	@50.00
Binders' Boards	65.00	@67.50
Sgl. Mla. Ll. Chip	51.00	@53.50
Wood Pulp	80.00	@85.00
Container	67.50	@72.50
85 test Jute Liner	57.50	@60.00

Mechanical Pulp

(Ex-Dock)

No. 1 Imported—		
Moist	30.00	@31.25
Dry	32.00	@34.00
(F. o. b. Mill)		
No. 1 Domestic	26.00	@29.00
Screenings	15.00	@20.00

Chemical Pulp

(Ex-Dock, Atlantic Ports)

Sulphite (Imported)—		
Bleached	3.65	@ 4.25
Easy Bleaching	2.70	@ 2.90
No. 1 strong unbleached	2.60	@ 2.70
Mitscherlich unbleached	2.65	@ 3.25
No. 2 strong unbleached	2.50	@ 2.60
No. 1 Kraft	2.60	@ 2.75
No. 2 Kraft	2.40	@ 2.50
Sulphate—		
Bleached	3.75	@ 3.85
(F. o. b. Pulp Mill)		
Sulphite (Domestic)—		
Bleached	3.40	@ 4.75
Easy Bleaching Sulphite	2.60	@ 2.75
News Sulphite	2.40	@ 2.65
Mitscherlich	3.00	@ 3.70
Kraft (Domestic)	2.70	@ 3.30
Soda Bleached	3.15	@ 3.50
Sulphate Screenings—		
Coarse	.75	@ .85
Refined	1.50	@ 1.65

Domestic Rags

New Rags

(Prices to Mill f. o. b. N. Y.)

Shirt Cuttings—		
New White, No. 1	11.25	@11.75
New White, No. 2	8.00	@ 8.50
Silesias No. 1	7 25	@ 7.75
New Unbleached	10.50	@11.00
Washables	4.25	@ 4.75
Fancy	5.50	@ 6.00
Blue Overall	6.75	@ 7.25
New Blue Prints	5.25	@ 5.50
New Soft Blacks	5.25	@ 5.75
Mixed Khaki Cuttings	4.75	@ 5.25
Pink Corset Cuttings	8.00	@ 8.50
O. D. Khaki Cuttings	5.25	@ 5.75
Men's Corduroy	3.75	@ 4.25
New Mixed Blacks	3.50	@ 3.75

Old Rags

White, No. 1—		
Repacked	5.50	@ 6.00
Miscellaneous	4.50	@ 5.00
White, No. 2—		
Repacked	3.00	@ 3.50
Miscellaneous	2.50	@ 2.75
St. Soiled, White	2.00	@ 2.15
Thirds and Blues—		
Repacked	2.25	@ 2.50
Miscellaneous	1.75	@ 2.00
Black Stockings	3.25	@ 3.75
Roofing Rags—		
Cloth Strippings	1.70	@ 1.80
No. 1	1.70	@ 1.80
No. 2	1.55	@ 1.65
No. 3	1.30	@ 1.40
No. 4	1.25	@ 1.35
No. 5A	.95	@ 1.05

Foreign Rags

New Dark Cuttings	2.50	@ 3.00
New Mixed Cuttings	2.75	@ 3.25
New Light Silesias	7.00	@ 7.50
Light Flannelettes	7.50	@ 8.00
Unbleached Cottons	10.00	@11.00
New White Cuttings	10.50	@11.50
New Light Oxfords	7.00	@ 7.50
New Light Prints	5.50	@ 6.50
No. 1 White Linens	7.25	@ 8.00
No. 2 White Linens	5.50	@ 6.25
No. 3 White Linens	4.50	@ 5.00
No. 4 White Linens	3.00	@ 3.50
Old Extra Light Prints	2.75	@ 3.25
Ord. Light Prints	2.25	@ 2.50
Med. Light Prints	1.90	@ 2.10
Dutch Blue Cottons	2.25	@ 2.50
German Blue Linens	2.50	@ 2.75
German Blue Cottons	2.00	@ 2.25
Checks and Blues	1.75	@ 1.90
Lindsay Garments	1.90	@ 2.00
Dark Cottons	1.65	@ 1.75
Old Shopperies	1.55	@ 1.65
New Shopperies	1.50	@ 1.60
French Blues	2.10	@ 2.25

Old Rope and Bagging

(Prices to Mill f. o. b. N. Y.)

Gunny No. 1—		
Foreign	1.60	@ 1.70
Domestic	1.70	@ 1.75
Wool Tares, light	1.60	@ 1.65
Wool Tares, heavy	1.60	@ 1.65
Bright Bagging	1.60	@ 1.65
Small Mixed Rope	1.25	@ 1.40
Manila Rope—		
Foreign	3.25	@ 3.50
Domestic	3.25	@ 4.00
New Burlap Cut	2.75	@ 3.00
Hessian Jute Threads—		
Foreign	3.50	@ 4.00
Domestic	3 25	@ 3.50

Old Waste Papers

(F. o. b. New York)

Shavings—		
Hard, white, No. 1	3.25	@ 3.50
Hard, white, No. 2	2.50	@ 2.65
Soft, White, No. 1	2.25	@ 2.50
White envelope cuttings	3.25	@ 3.50
Flat Stock—		
Stitchless	1.60	@ 1.70
Overissue Mag.	1.60	@ 1.70
Solid Flat Book	1.45	@ 1.55
Crumpled No. 1	1.10	@ 1.20
Solid Book Ledger	2.00	@ 2.10
Ledger Stock	1.60	@ 1.75
Manilas—		
New B. B. Chips	.65	@ .75
New Env. Cut	2.40	@ 2.60
New Cuttings	1.60	@ 1.85
Extra No. 1 old	1.25	@ 1.35
Print	.75	@ .85
Container	.65	@ .70
Bogus Wrapper	.75	@ .85
Old Kraft Machine Compressed bales	1.80	@ 1.90
News—		
No. 1 White News	1.55	@ 1.65
Strictly Overissue	.80	@ .90
Strictly folded	.60	@ .70
No. 1 Mixed Paper	.50	@ .55
Common Paper	.30	@ .35

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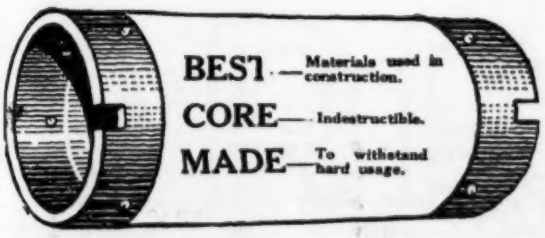

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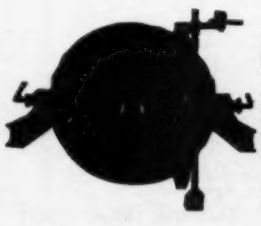

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Twines

(F. o. b. Mill)

Cotton—			
No. 1	.39	@	.40
No. 2	.37	@	.38
No. 3	.36	@	.37
B. C., 18 basis	.38	@	.40
A. B. Italian, 18 basis	.48	@	.53
Finished Jute—			
Dark 18 basis	.24	@	.25
Light 18 basis	.27	@	.28
Jute Wrapping, 3-6 Ply—			
No. 1	.21	@	.23
No. 2	.20	@	.22
Tube Rope—			
4-ply and larger	.18	@	.19
Fine Tube Yarn—			
5-ply and larger	.23	@	.27
4-ply	.24	@	.28
3-ply	.26	@	.30
Unfinished India—			
Basis	.16	@	.17
Paper Makers Twine Balls	.13	@	.15
Box Twine, 2-3 ply	.17	@	.19
Jute Rope	.21	@	.23
Ameri. Hemp, 6	.29	@	.31
Sisal Hay Rope—			
No. 1 Basis	.18	@	.20
No. 2 Basis	.16	@	.18
Sisal Lath Yarn—			
No. 1	.16	@	.18
No. 2	.14	@	.16
Manila Rope	.24	@	.26

CHICAGO

All Rag Bond	.35	@	.41
No. 1 Rag Bond	.25	@	.35
No. 2 Rag Bond	.14	@	.25
Water Marked Sulphite Bond	.09	@	.12
Sulphite Bond	.06¾	@	.11
Superfine writing	.18	@	.24
No. 1 fine writing	.14	@	.18
No. 2 fine writing	.12	@	.14
No. 3 fine writing	.08½	@	.12
No. 1 M. F. Book	.06½	@	.07½
No. 2 M. F. Book	.05½	@	.06¼
No. 1 S.&S.C. Book	.06¾	@	.07¾
No. 2 S.&S.C. Book	.05¾	@	.06½
Coated Book	.07½	@	.12
Coated Label	.07½	@	.10
News—Roll, mill	.03½	@	.04¼
News—Sheets, mill	.03¾	@	.04¾
No. 1 Manila	.04¼	@	.05¾
No. 1 Fibre	.04¾	@	.05½
No. 2 Manila	.04¼	@	.04¾
Butcher's Manila	.04	@	.04½
No. 1 Kraft	.06¼	@	.06½
Southern Kraft	.03¾	@	.04
No. 2 Kraft	.04	@	.04¼
Wood Tag Boards	.04¼	@	.06¼
Sulphite Screenings	.03	@	.03¼
Manila Tissue—			
24x36 Sheet	.07	@	.07¾
White Tissue—			
20x30 Sheet	.07¼	@	.07½
Boards, per ton—			
(Delivered Central Territory)			
Plain Chip	37.50	@	41.00
Solid News	47.50	@	—
Manila Lined Chip	55.00	@	—
Container Lined—			
(Delivered Central Territory)			
'85 Test	65.00	@	70.00
100 Test	70.00	@	—

Old Papers

(F. o. b. Chicago)

Shavings—			
No. 1 Hard White	2.80	@	2.90
White Env. Cuttings	2.90	@	3.00
No. 1 Soft Shavings	2.50	@	2.60
No. 1 Mixed	1.00	@	1.05
No. 2 Mixed	.90	@	1.00
Ledger & Writings	1.55	@	1.65
Solid Books	1.25	@	1.35
Blanks	1.70	@	1.80
Krafts	1.90	@	2.00
New Kraft Cuts	2.25	@	2.35
Manila Envelope Cuttings	2.00	@	2.10
Ex. No. 1 Manila	1.55	@	1.65
Print Manila	.90	@	1.00
Folded News (oversue)	.65	@	.75
Old Newspapers—			
No. 1	.65	@	.75
No. 2	.60	@	.65
Mixed Papers—			
No. 1	.70	@	.80
Roofing Stocks—			
(F. o. b. Chicago, net cash)			
No. 1	30.00	@	—
No. 2	28.00	@	—

PHILADELPHIA

Paper

(F. o. b. Mill)

Bonds	.07	@	.40
Ledgers	.11	@	.40
Writings—			
Superfine	.13	@	.18
Extra fine	—	@	.22
Fine	.20	@	.26½
Fine, No. 2	.16	@	.25
Fine, No. 3	.12	@	.20
Book, M. F.	.06	@	.07
Book, S. S. & C.	.06	@	.07½
Book, Coated	.11	@	.16
Coated Lithograph	.09	@	.12
Label	.09	@	.12
News	.03¾	@	.04
No. 1 Jute Manila	.08½	@	.09
Manil Sul., No. 1	.04½	@	.06
Manil No. 2	.04	@	.04½
No. 2 Kraft	.05¾	@	.05½
No. 1 Kraft	.06	@	.06¼
Common Bogus	.02¾	@	—
Straw Board	50.00	@	75.00
News Board	47.50	@	—
Chip Board	42.50	@	45.00
Wood Pulp Board	4.50	@	5.00
(Carload Lots)			
Binder Boards—			
No. 1, per ton	80.00	@	90.00
No. 2, per ton	75.00	@	80.00
Carload lots	65.00	@	75.00
Tarred Felts—			
Regular	58.00	@	63.00
Slaters (per roll)	.84	@	.94
Best Tarred, 1-ply (per roll)	1.85	@	1.95
Best Tarred, 2-ply (per roll)	1.44	@	1.54
Best Tarred, 3-ply	1.93	@	2.08
No. 1 Mixed Paper	.65	@	.70

Domestic Rags (New)

(Price to Mill, f. o. b. Phila.)

Shirt Cuttings—			
New White, No. 1	.11½	@	.12
New White, No. 2	.07	@	.07½
Light Silesias	.07	@	.07½
Silesias, No. 1	.07½	@	.08
Black Sil. ia, soft	.05	@	.05½
New Unbleached	.10½	@	.11
Washable	.03½	@	.04
Fancy	.05½	@	.06
Cottons—according to grades—			
Blue Overall	.07½	@	.08
New Blue	—	@	.04
New Black Soft	.05½	@	.06
New Light Seconds	.03	@	.03½
Khaki Cuttings	.04½	@	.05
Corduroy	.03	@	.03¾
New Canvas	.08	@	.09½
New Black Mixed	.05	@	.05½

Bagging

(F. o. b. Phila.)

Gunny, No. 1—			
Foreign	1.75	@	2.00
Domestic	1.75	@	2.00
Manila Rope	3.50	@	4.00
Sisal Rope	1.50	@	—
Mixed Rope	1.10	@	1.25
Scrap Burlaps	1.40	@	1.50
Wool Tares, heavy	3.00	@	—
Mixed Strings	1.15	@	1.25
No. 1, New Light Burlap	2.50	@	2.75
New Burlap Cuttings	—	@	2.50

Old Papers

(F. o. b. Phila.)

Shavings—			
No. 1 Hard White	3.20	@	3.25
No. 2 Hard White	2.75	@	3.00
No. 1 Soft White	2.40	@	2.50
No. 2 Soft White	1.90	@	2.00
No. 1 Mixed	1.50	@	1.60
No. 2 Mixed	.90	@	1.00
Solid Ledger Stock	1.50	@	1.60
Writing Paper	1.50	@	1.60
No. 1 Books, heavy	1.50	@	1.60
No. 2 Books, light	1.25	@	1.40
No. 1 New Manila	2.40	@	2.50
No. 1 Old Manila	1.50	@	1.60
Print Manila	.95	@	1.00
Container Manila	.80	@	.90
Old Kraft	2.25	@	2.50
Common Paper	.50	@	.55
No. 1 Mixed Paper	.55	@	.60
Straw Board, Chip	.60	@	.65
Binders Board, Chip	.60	@	.65
Overissue News	.75	@	.80
Old Newspaper	.50	@	.60

Domestic Rags (Old)

White, No. 1—			
Repacked	4.25	@	4.50
Miscellaneous	3.50	@	4.00
White, No. 2—			
Repacked	.02¼	@	.02¾
Miscellaneous	.01¼	@	.02
Thirds and Blues—			
Repacked	2.00	@	2.25
Miscellaneous	1.80	@	2.00
Black Stockings	3.75	@	4.00
Roofing Stock—			
No. 1	1.65	@	1.75
No. 2	1.40	@	1.50
No. 3	1.25	@	—
No. 4	1.25	@	—
No. 5A	.85	@	.90
B	.80	@	.90
C	.70	@	.80

BOSTON

Paper

(F. o. b. Mill)

Ledgers—			
Sulphite	.07½	@	.15
Rag content	.15	@	.30
All rag	.38	@	.52½
Bonds—			
Sulphite	.06½	@	.11½
Rag content	.15	@	.30
All rag	.36½	@	.65
Writings	.07	@	.20
Superfines	.11	@	.31
News	.03½	@	.04
Book, Super	.06	@	.09
Book, M. F.	.05¾	@	.08½
Book, Coated	.08½	@	.20
Coated Litho	.09	@	.12
Label	.09½	@	.15
Jute Manila No. 1	.11	@	.13
Manila, Sul. No. 1	.04¾	@	.06½
Manila, Sul. No. 2	.03¾	@	.04½
No. 1 Kraft	.05½	@	.06½
No. 2 Kraft	.04	@	.04¾
Common Bogus	.02	@	.02¾
Delivered New England points			
Straw Boards, rolls .009			52.50
Straw Board in Sheets, basis 35s to 70s	54.50	@	55.00
Filled News Board			47.50
Chip Board			45.00
Single Manila Pulp Lined Board	52.50	@	57.50
Single White, Patent Coated Newsboard Bender	70.00	@	80.00
Wood Pulp Board	80.00	@	85.00
Binder Boards	70.00	@	75.00
(F. o. b. Mill)			
Tarred Felts—			
Regular, carload lots	65.00	@	—

Old Papers

(F. o. b. Boston)

Shavings—			
No. 1 Hard White	3.25	@	3.75
No. 2 Hard White	2.60	@	2.90
No. 1 Soft White	2.45	@	2.55
No. 1 Mixed	1.10	@	1.15
No. 2 Mixed	.85	@	.90
Solid Ledger Stock	2.35	@	2.45
No. 1 Books, Heavy	1.55	@	1.60
No. 1 Books, Light	—	@	1.15
Manila Env. Cuttings	2.00	@	2.25
No. 1 Old Manila	1.20	@	1.25
White Blank News	1.50	@	1.60
Old Kraft	1.90	@	2.00
Print Manila	.70	@	.80
No. 1 Mixed Paper	.55	@	.60
Overissue News	.70	@	.80
Old Newspapers	.60	@	.65
Box Board, Chip	.65	@	—

Bagging

(Price f. o. b. Boston)

Gunny No. 1—			
Foreign	—	@	1.60
Manila Rope—			
Foreign	3.25	@	3.62½
Domestic	3.50	@	3.75
Mixed Strings	.85	@	1.00
Scrap Burlaps	1.50	@	1.60
Scrap Sisal	1.25	@	—
Scrap Sisal for shredding	1.50	@	—
Wool Tares, heavy	—	@	1.50
New Burlap Cutting	—	@	2.00

Domestic Rags (New)

(Price f. o. b. Boston)

Shirt Cuttings—			
New White No. 1	.09	@	.10
Silesias, No. 1	.07	@	—
New Unbleached	.09½	@	.10
Fancy	.04	@	.04½
Washable	.04	@	.04½
Cottons—According to grades			
Blue Overalls	.06	@	.06½
New Black, soft	.04	@	.04½
Khaki Cuttings	.04	@	.04½
Corduroy	.03	@	.03½
New Canvas	.08	@	.08½

Domestic Rags (Old)

(Price f. o. b. Boston)

Canvas	.04½	@	—
White No. 1—			
Repacked	4.75	@	5.25
Miscellaneous	5.00	@	—
White No. 2—			
Repacked	.04½	@	.05
Miscellaneous	.03½	@	.04
Thirds and Blues—			
Repacked	2.00	@	2.15
Miscellaneous	1.75	@	1.90
Roofing Stock—			
No. 1	1.75	@	1.85
No. 2	1.45	@	1.55
No. 3	1.05	@	1.10
No. 4	1.10	@	1.15

Foreign Rags

(F. o. b. Boston)

Dark Cottons	1.65	@	1.70
New No. 1 Shirt Cuttings	9.00	@	10.00
Dutch Blues	2.00	@	2.12½
Lace Curtains	5.00	@	5.50
New Checks & Blues	4.50	@	4.65
Old Fustians	1.90	@	—

TORONTO

Paper

(F. o. b. Mill)

Bond—			
No. 1 Sulphite	.12½	@	—
No. 2 Sulphite	.10¼	@	—
No. 1 Colored	.13½	@	—
No. 2 Colored	.11¼	@	—
Ledgers (sulphite)	—	@	—
Ledgers, No. 1	.36	@	—
Ledgers, No. 2	.27	@	—
Writing	.09½	@	.10
News f. o. b. Mills—			
Rolls (carloads)	3.25	@	—
Sheets (carloads)	3.75	@	—
Sheets (2 tons or over)	4.00	@	—
Book—			
No. 1 M. F. (carloads)	7.50	@	—
No. 2 M. F. (carloads)	7.25	@	—
No. 3 M. F. (carloads)	7.00	@	—
No. 1 S. C. (carloads)	8.00	@	—
No. 2 S. C. (carloads)	7.75	@	—
No. 3 S. C. (carloads)	7.50	@	—
No. 1 Coated and Litho	14.50	@	
No. 2 Coated and Litho	13.50	@	—
No. 3 Coated and Litho	12.75	@	—
Coated tinted	.15	@	—
Wrapping—			
Rag Brown	4.95	@	—
White Wrap	5.25	@	—
"B" Manila	5.80	@	—
No. 1 Manila	6.65	@	—
Fiber	6.65	@	—
Kraft, M. F.	7.00	@	—
M. G.	7.00	@	—

Pulp

(F. o. b. Mill)

Ground Wood	30.00	@	31.00
Sulphite easy bleaching	62.00	@	—
Sulphite news grade	62.00	@	—
Sulphite, bleached	75.00	@	—
Sulphate	65.00	@	—

Old Waste Paper

(In carload lots, f. o. b. Toronto)

Shavings—			
White Env. Cut	3.00	@	—
Soft White Book Shavings	2.85	@	—
White Blk, News	1.50	@	—
Book and Ledger—			
Flat Magazine and Book Stock (old)	1.40	@	—
Light and Crumpled Book Stock	1.25	@	—
Ledgers and Writings	1.50	@	—
Solid Ledgers	1.50	@	—
Manilas—			
New Manila Cut	1.50	@	—
Printed Manilas	1.00	@	—
Kraft	2.25	@	—
News and Scrap—			
Strictly Overissue	.80	@	—
Strictly Folded	.80	@	—
No. 1 Mixed Paper	.65	@	—

Domestic Rags

(Price to mills, f. o. b. Toronto)

No. 1 White Shirt Cuttings	11½	@	—
Fancy Shirt Cuttings	05½	@	—

Clipping the corners off the Felt Bill.

It is a rather significant fact that several recent tests should show Orr Felts outlasting felts with which they were compared —not by hours, but by as much as several days.

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THE ORR FELT & BLANKET CO.

Piqua, Ohio

ORR FELTS

PAPER TRADE JOURNAL

ESTABLISHED 1872

THE INTERNATIONAL WEEKLY OF THE PAPER AND PULP INDUSTRY AND THE PIONEER PUBLICATION IN ITS FIELD

FIFTY-SEVENTH YEAR

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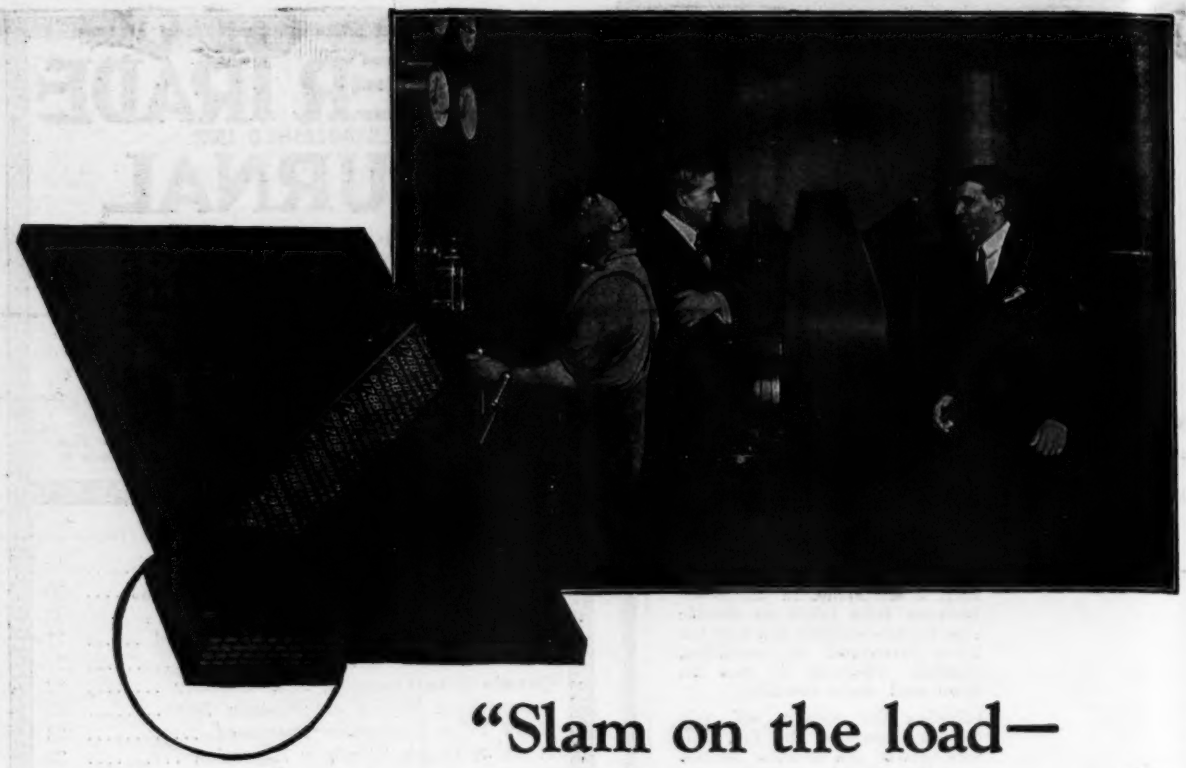

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